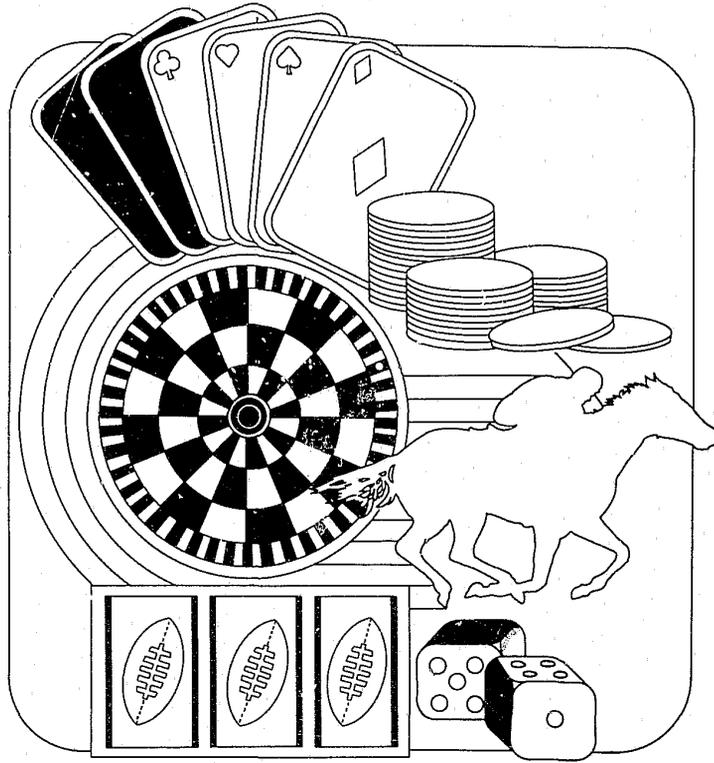


Gambling in America



Appendix 2 Survey of American Gambling Attitudes and Behavior

42281

MICROFICHE

Commission on the Review
of the National
Policy Toward Gambling

SURVEY OF AMERICAN GAMBLING ATTITUDES AND BEHAVIOR

By

Maureen Kallick
Daniel Suits
Ted Dielman
Judith Hybels

Survey Research Center
Institute for Social Research
The University of Michigan

* * * *

A REVIEW OF TWO STUDIES ON GAMBLING IN THE UNITED STATES

By

Daniel Melnick
Royce Crocker

Government Division
Congressional Research Service
The Library of Congress

NCJRS
JUL 7 1977
ACQUISITIONS

Washington: 1976

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402 - Price \$5.85

Stock No. 052-003-00254-0

**COMMISSION ON THE REVIEW OF THE
NATIONAL POLICY TOWARD GAMBLING**

2000 M STREET, N.W.
WASHINGTON, DC 20036

15 October 1976

Honorable Gerald R. Ford
President of the United States
Washington, D.C.

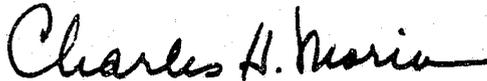
Honorable Nelson A. Rockefeller
President of the Senate
Washington, D.C.

Honorable Carl Albert
Speaker of the House of Representatives
Washington, D.C.

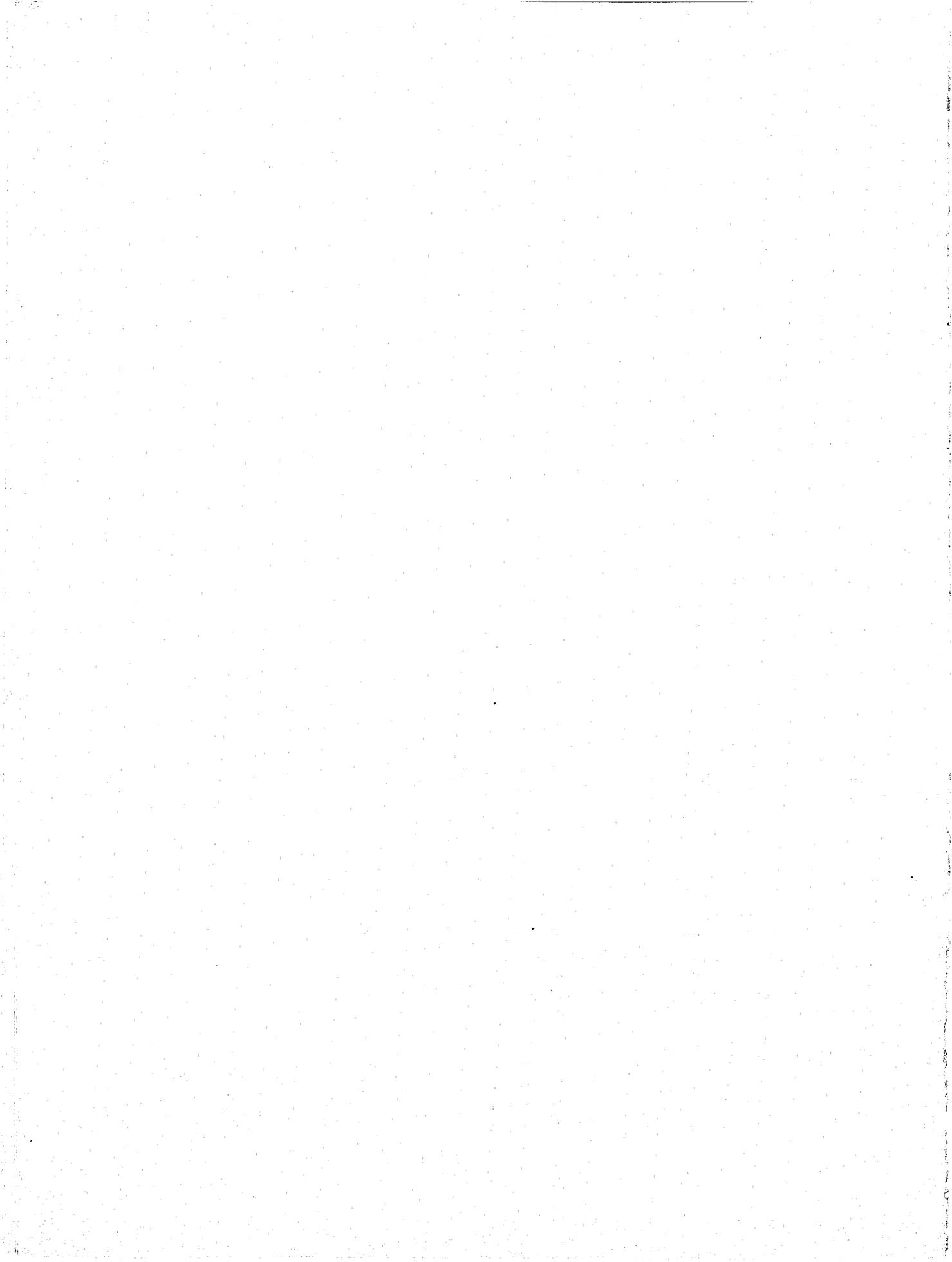
GENTLEMEN:

In accordance with the provisions of sections
804-808 of Public Law No. 452, Ninety-first Congress,
the Commission on the Review of the National Policy
Toward Gambling has the honor to submit its final
report of findings and recommendations.

Respectfully yours,



Charles H. Morin
Chairman



COMMISSION MEMBERSHIP

Charles H. Morin, Chairman
Attorney, Washington, D.C.

Ethel D. Allen, D.O.
City Councilwoman-at-large
Philadelphia

Senator John L. McClellan
Democrat, Arkansas

Philip Cohen
Executive Director
National Legal Data Center

Senator Howard W. Cannon
Democrat, Nevada

James M. Coleman, Jr.
Prosecutor
Monmouth County, N.J.

Senator Hugh Scott
Republican, Pennsylvania

Joseph A. Gimma
Investment Broker
New York

Senator Robert Taft, Jr.
Republican, Ohio

Robert List
Attorney General
State of Nevada

Representative James M. Hanley
Democrat, New York

Charles F. Phillips, Jr.
Professor of Economics
Washington and Lee University

Representative Charles E. Wiggins
Republican, California

Representative Sam Steiger
Republican, Arizona

Representative Gladys Noon Spellman
Democrat, Maryland

James E. Ritchie
Executive Director

Marilyn Marshall
Deputy Director

Former members: Representative Charles J. Carney (D-Ohio); former Senators Edward J. Gurney (R-Fla.) and Marlow W. Cook (R-Ky.); former Representatives John E. Hunt (R-N.J.) and Lawrence J. Hogan (R-Md.); and Judge David D. Dowd, Jr., former prosecuting attorney, Stark County, Ohio

COMMISSION STAFF

Officials

James E. Ritchie: Executive Director

Marilu Marshall: Deputy Director

Stephen B. Bull: Director, Communications and Research

Thomas Farrell: Associate Counsel

David Drelich: Assistant Counsel

Rita Hallaren: Administrative Officer

Staff

Student Assistants

Bruce A. Butcher
Carol D. Cragg
Robert E. Creeden
Robinette L. Davis
Norma D. Dosky
Carol H. Duncan
Anne M. Fleming
Stephen C. Fogelman
Kathleen J. Foley
Katharine M. Francone
Nancy S. Hendee
Kathleen M. Joyce
Lael L. Kenyon
Roger L. Kreuzer
Patricia A. Owens
Leslie M. Pittler
Peter H. Reuter
Jacqueline A. Sheppard
Joseph D. Van Cleve, III
Betty J. White

Dianne Blocker
Sharon L. Cohen
Thomas J. Daley
Margaret R. Dinneen
Karen S. Erickson
William R. Geyer
Ann D. Gray
Michael E. Joseph
Harold A. Kurland
Roger H. Marks
Howard J. Marx
David Moore
James Muskett
Robert S. Pasley
Layn R. Phillips
Lisa K. Powell
Michael H. Tonry
Deborah L. Tyler
Peter W. Waldmeir

Editorial Staff

Nina Graybill: Editor

DuPre Jones: Editor

Patricia Helsing: Writer

PRINCIPAL CONSULTANTS

*G. Robert Blakey
Director, Cornell Institute
on Organized Crime
Ithaca, New York

*Richard C. Crane
Attorney
Los Angeles, California

*Edward F. Harrington
Attorney
Boston, Massachusetts

James Jay Hogan
Attorney
Miami, Florida

Laurence T. Hoyle, Jr.
Attorney
Philadelphia, Pennsylvania

Carl M. Loeb, Jr.
Former Vice President, Amax, Inc.
Greenwich, Connecticut

Naurbon L. Perry
Retired Special Agent
IRS Intelligence
Los Angeles, California

*Clyde B. Pritchard
Attorney
Southfield, Michigan

*Stephen H. Scott
Attorney
Phoenix, Arizona

*John Bern Simon
Attorney
Chicago, Illinois

*Former attorneys with the U.S. Department of Justice.

CONSULTANTS

Raymond Bell
Former Clergyman
Presbyterian Church

Ordway P. Burden
William A. M. Burden & Co.
New York, New York

Joel David Chananie
Assistant Professor
University of Southern
California
Los Angeles, California

John H. Ciccolo, Jr.
Assistant Professor
Boston College
Boston, Massachusetts

H. Sheldon Detrick
Realtor
Tulsa, Oklahoma

Melvin Finerman
Chairman of the Board
Mel Finerman Co., Inc.
Encino, California

Floyd J. Fowler, Jr.
Director
Survey Research Program
Boston, Massachusetts

J. Bruce Johnson
Manchester, Maine

James Michael Kretz
Research Associate
Bureau of Social Science
Research, Inc.
Washington, D.C.

Jack T. LaReese
Businessman
Oklahoma City, Oklahoma

William T. McIlwain
Senior Vice President
First Bancshares of Florida, Inc.
Boca Raton, Florida

Mark H. Moore
Assistant Professor
Harvard University
Cambridge, Massachusetts

Charles N. Nuber
Lecturer
University of Arizona
Tucson, Arizona

John Olszewski
Retired Director of
Intelligence, IRS
Severna Park, Maryland

Fred H. Ryan
Retired President, Los Angeles
Turf Club
Arcadia, California

Ralph C. Thomas
Professor of Law
University of Tulsa
Tulsa, Oklahoma

NOTE TO READER

The Survey of American Gambling Attitudes and Behavior was prepared for the National Gambling Commission by the University of Michigan Survey Research Center. The survey is reproduced in this volume in its entirety; it has not been edited by the Commission. The Commission's final report, Gambling in America, contains a summary of the survey findings along with the Commission's analysis of these findings.

At the Commission's request, the Congressional Research Service of the Library of Congress studied the Michigan survey data pertaining to the amount of illegal gambling that takes place; it also analyzed a study conducted by the Department of Justice on the same subject. The Library of Congress paper is contained at the end of this volume.

SURVEY OF AMERICAN GAMBLING ATTITUDES AND BEHAVIOR

FINAL REPORT

Prepared for:

Commission on the Review of the
National Policy Toward Gambling

by

Maureen Kallick

Daniel Suits

Ted Dielman

Judith Hybels

Survey Research Center
Institute for Social Research
The University of Michigan
Ann Arbor, Michigan

1976

ACKNOWLEDGEMENTS

This study is the product of many people who each contributed their special skills. The authors thank Irene Hess under whose supervision the survey samples were drawn, John Scott and Tracy Berckmans who directed the interviewing, Joan Scheffler and her coding staff, Duane Thomas, Brian Jeltema and other data processing personnel, and Rod Eatman who typed the final text. Most especially we gratefully acknowledge the contributions of Randy Rassoul, Phil Tedeschi and Lynn Dielman. Randy, the project's research assistant, helped in all phases-- data cleaning, writing tables, editing and manuscript preparation. Phil programmed and ran most of the data and then edited the entire manuscript. Lynn designed and typed every table in this report. Thanks also to the staff of the Gambling Commission, especially Peter Reuter, their Research Director, who advised and supported us through these hectic months. Finally, a special thank you to George Katona, who read drafts of chapters one through four and made numerous suggestions which contributed greatly to the report as you see it today. To all those who are named and unnamed, we genuinely thank you.

Maureen Kallick

Daniel Suits

Ted Dielman

Judith Hybels

CONTENTS

	page
Highlights	i
Objectives	vii
Introduction	ix
Chapter One: <u>Gambling Participation</u>	1
1.1 Patterns of Participation; 1.2 Gambling Among Friends;	
1.3 Legal Commercial Gambling; 1.4 Illegal Gambling;	
1.5 A Multivariate Analysis of Economic And Demographic	
Factors Influencing Gambling; 1.6 Nevada Residents	
Chapter Two: <u>Dynamics of Gambling</u>	45
2.1 Reasons Given for Gambling on Particular Games;	
2.2 Availability of and Exposure to Gambling; 2.3 Situational	
Correlates of Gambling; 2.4 Compulsive Gambling and Other	
Socially Undesirable Correlates of Gambling; 2.5 Excitement	
and Other Needs; 2.6 Perceptions of Luck and Skill; 2.7 Percep-	
tions of Fixing; 2.8 Gambling as a Leisure Time Activity	
Chapter Three: <u>Economic Aspects of Gambling</u>	93
3.1 Expenditures; 3.2 Income Incidence of Betting; 3.3 Rev-	
enue Potential of Legalizing Gambling	
Chapter Four: <u>Legalization of Gambling</u>	137
4.1 Knowledge of Gambling Laws; 4.2 Attitudes Toward Legali-	
zation; 4.3 Effect of Legalization on Illegal Gambling	
Chapter Five: <u>Betting on Horses</u>	177
5.1 Participation; 5.2 Who Bets on Horse Races?; 5.3 Leisure	
Time Use and Betting on Horses; 5.4 Betting on Horses and Other	
Betting; 5.5 Exposure to Betting on Horses; 5.6 Legalization	
of Gambling and Betting on the Horses; 5.7 Luck and Skill;	
5.8 Perception of "Fixed" Races; 5.9 Convenience and Avail-	
ability; 5.10 Off-Track Betting in New York; 5.11 Needs;	
5.12 Ratings of Excitement; 5.13 Reasons People Play;	
5.14 Beliefs About and Attitudes Towards Legalization	
Chapter Six: <u>Casinos</u>	227
6.1 Who Gambles at Casinos?; 6.2 Casino Trips and Casino	
Games; 6.3 Leisure Time; 6.4 Casino Bettors and Other Forms	
of Gambling; 6.5 Exposure to Casino Gambling; 6.6 Excitement	
and Other Needs; 6.7 Perception of Games; 6.8 Attitudes	
Toward Legalization of Casinos and Slot Machines; 6.9 Reasons	
Why People Say They Go (Don't Go) to Casinos	

- Chapter Seven: Bingo 249
7.1 Participation Rates and Availability; 7.2 Who Plays Bingo?; 7.3 Who Runs the Bingo Games?; 7.4 Expenditures and Revenue; 7.5 Reasons Why People Play Bingo; 7.6 Exposure, Excitement, and Potential Participation; 7.7 Bingo Players and Other Betting; 7.8 Leisure Time Use; 7.9 The Legal Status of Bingo
- Chapter Eight: Lotteries 275
8.1 Participation in Lotteries; 8.2 Leisure Time Use and Lottery Participation; 8.3 Lottery Participation and Other Betting; 8.4 Exposure to Lottery Participation; 8.5 Legalization of Gambling and Lottery Participation; 8.6 Convenience; 8.7 Luck and Skill; 8.8 Perception of "Fixes"; 8.9 Ratings of Excitement; 8.10 Needs; 8.11 Attitudes Toward Legalization; 8.12 Reasons People Give for Buying or Not Buying Lottery Tickets
- Chapter Nine: Sports Betting 297
9.1 Participation in Sports Betting; 9.2 Leisure Time Use and Attendance at Games; 9.3 Sports Bettors and Other Betting; 9.4 Exposure, Legalization, and Sports Betting; 9.5 Luck and Skill; 9.6 Perception of "Fixed" Games; 9.7 Needs; 9.8 Excitement Ratings of Sports Betting; 9.9 Reasons Given for Betting or Not Betting on Sports; 9.10 Attitudes Toward Legalization
- Chapter Ten: Numbers 335
10.1 Extent of Numbers Betting; 10.2 Who Bets on the Numbers?; 10.3 Leisure Time Use and Numbers Betting; 10.4 Numbers Betting and Other Betting; 10.5 Exposure to Numbers Betting; 10.6 Legalization of Gambling and Numbers Betting; 10.7 Luck and Skill; 10.8 Perception of "Fixed" Games; 10.9 Convenience And Availability; 10.10 Needs; 10.11 Ratings of Excitement; 10.12 Reasons People Give for Playing the Numbers; 10.13 Attitudes Toward Legalization
- Chapter Eleven: Nevada 361
11.1 Who Gambles in Nevada?; 11.2 Participation; 11.3 Reasons Why/Why Not; 11.4 Exposure and Availability; 11.5 Situational Correlates; 11.6 Needs and Need Fulfillment; 11.7 Perceptions of Luck and Skill and Excitement; 11.8 Perceptions of Fixes; 11.9 Gambling as a Leisure Time Activity; 11.10 Legalization; 11.11 Casinos, Slot Machines, and Keno

Chapter Twelve: Compulsive Gamblers

12.1 Selection of Items for Scale Development; 12.2 Data Collection and Analysis Procedures; 12.3 Scores on Predictor Items and Compulsive Gambling Classification; 12.4 Demographic Variables and Compulsive Gambling; 12.5 Stability and Compulsive Gambling; 12.6 Exposure to Gambling and Compulsive Gambling; 12.7 Needs and Need Fulfillment; 12.8 Compulsive Gambling and Betting Behavior; 12.9 Compulsive Gambling in Nevada

Appendix A: Procedures

A-1

Appendix B: Methodological Notes

B-1

Appendix C: Glossary

C-1

Appendix D: Questionnaire Schedule

D-1

Appendix E: Nevada--Screening Questionnaire and Comparison with National Sample Demographics

E-1

HIGHLIGHTS

Kallick, Maureen; Suits, Daniel; Dielman, Ted and Hybels, Judith
Gambling in the United States, Commissioned by the Commission on the Review
of National Policy Toward Gambling, Survey Research Center, The University
of Michigan, April, 1975.

A national probability sample of 1,736 respondents and a Nevada state probability sample of 296 respondents were surveyed during the summer of 1975 to determine the extent of gambling activity in the United States, to estimate government revenues that could result from various changes in gambling laws and to examine the social consequences of these changes.

It was determined that:

■ 61 percent of all adult Americans placed some kind of money bet in 1974.

13 percent bet only with friends or co-workers, 44 percent bet on one or more of eight legal commercial games (bingo, lotteries, casinos, horse tracks, dog tracks, jai alai, OTB in New York, Pickit in New Jersey), and 11 percent bet on one or more of five illegal games (betting on sports with a bookie, betting on horses with a bookie, numbers, sports cards, illegal casinos). In total, 48 percent placed a bet with someone other than with a friend.

■ Betting was not confined to a few groups or a few areas. A sizable majority of most major demographic subgroups bet in 1974, with wide variation among regions and demographic groups. For example, 80 percent of people living in the Northeast part of the United States bet in 1974,

while in small cities and rural areas only 53 percent placed a bet in that year.

- Wagers on commercial games amounted to \$22.4 billion in 1974: \$17 billion was wagered legally and \$5 billion wagered illegally. This amounted to \$387 per bettor or \$150 per capita of United States adult population. The average annual amount wagered per bettor on legal games came to \$273 and on illegal games to \$318. Distribution of wagering, however, was uneven. Over half the bettors bet less than \$50 during 1974 and only 14 percent bet more than \$200. The cost of this gambling, measured by bettors' net losses, amounted to \$4.4 billion, of which \$1.1 billion went to illegal operators.
- The popularity of a game varies widely depending on availability, legal status, and the preference of gamblers. Participation rates ranged from 2 percent of United States adults who bet on horses with a bookie to almost 50 percent of residents of states that offered state lotteries who purchased lottery tickets.
- For all games, there was a strong tendency for participation and wagers to rise with income, but with two exceptions (sports books and casinos); they did not rise as steeply as income. This regressivity was even greater in Nevada than in the nation at large, suggesting that low-income people are more readily caught up in the social atmosphere of extended gambling.

■ Participation rates in legal commercial gambling, illegal gambling and betting among friends rose in the presence of more legal facilities. This held true even when attitudes toward gambling, which presumably affect both the laws and the individual's behavior, were held constant. The provision of one or more legal games stimulated total gambling activity and created a more favorable environment for illegal operators. The expectation that legal facilities would decrease participation and divert funds from illegal operators was not supported, although some legal games tended to work in that direction. In Nevada where practically all forms of gambling are legal the effect of full-scale legalization was most clearly seen.

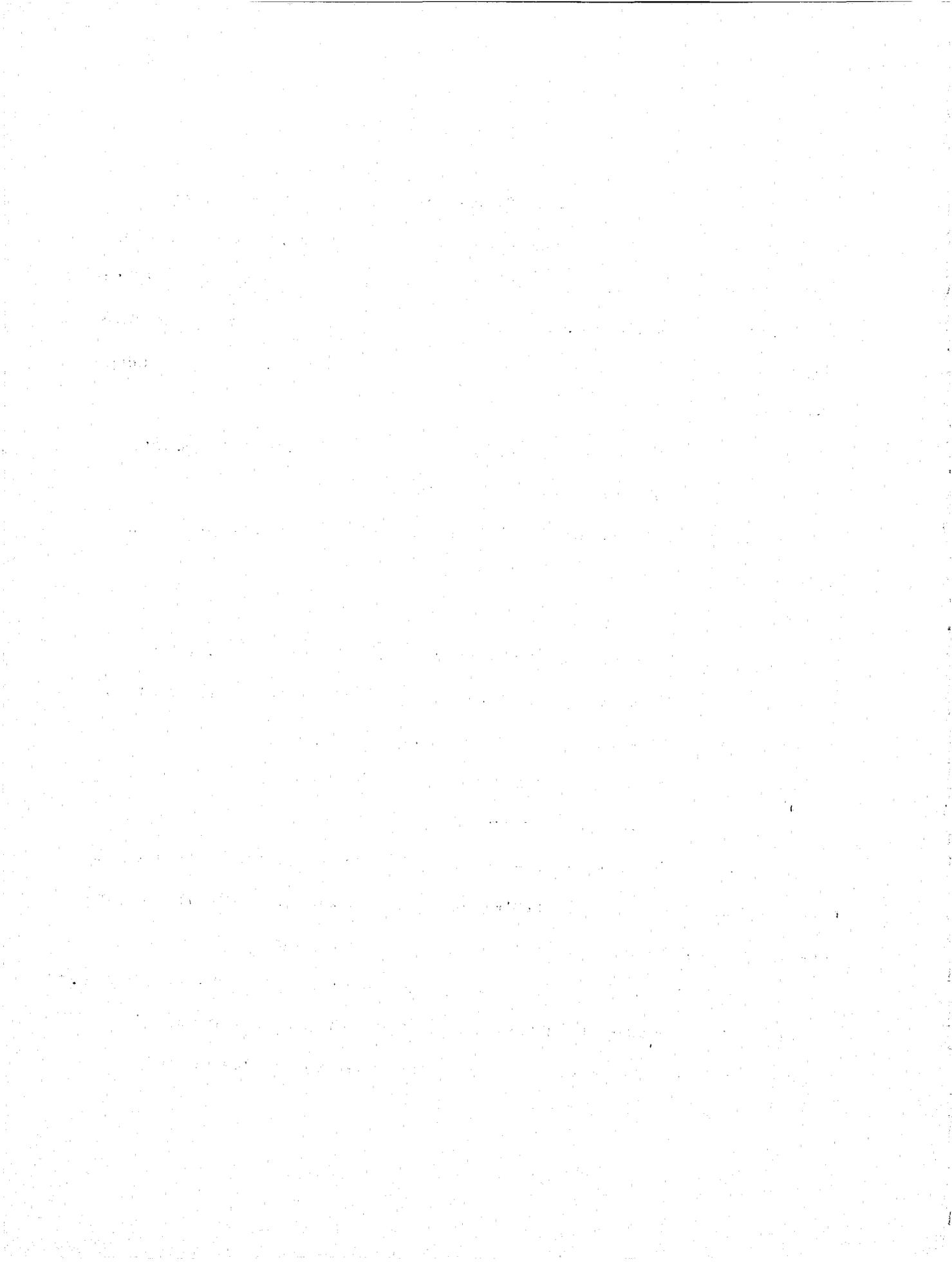
■ Nevada residents, even excluding those who said they moved there because of the gambling facilities, exhibited much greater participation in gambling. Overall, 78 percent bet on something in 1974, compared to 61 percent in the rest of the nation, but the most striking difference was in the type of betting. Over three quarters of Nevadans bet through the legal commercial channels (compared to 44 percent in other parts of the nation), only 4 percent bet illegally (compared to 11 percent) and less than 2 percent bet exclusively with friends (compared to 13 percent). In addition the average bettor in Nevada bet more in total, although less on illegal games. The average annual amount wagered through legal commercial channels was \$665 per Nevada bettor (compared to \$273 nationally) and \$238 through illegal channels (compared to \$318 nationally).

■ Four-fifths of the respondents said they were for legalization of at least one gambling activity, but there was so little consensus on which games should be legal that no one game, unless it was perceived to be already legal, was favored for legalization by a majority of adults in the United States. On the other hand, where games were already legal, large majorities supported their continuation. Overall, there is strong support for the preservation of the status quo in terms of gambling legislation. However, in three of the four geographic regions of the country, there was majority public support for making some games legal, principally bingo, horse tracks, dog tracks, or state lotteries. The Southern region of the country did not show majority support for the legalization of any game. None of the four major illegal activities -- betting on sports with a bookie, betting on horses with a bookie, sports cards, or numbers -- had majority support for legalization. Differences were observed according to region, demographic group, and current betting behavior.

■ A maximum of \$8.3 billion in net state revenue would result if current legal prohibitions on gambling were removed and appropriate tax rates were applied. Of this amount, \$1.2 billion is currently being realized and about triple that is the estimated potential from games which are already legal in some parts of the country. Of this new revenue, \$3.2 billion could come from legalization and widespread marketing of a legal numbers game. Only \$1.3 billion could be expected to come from the three other currently illegal games.

■As a proportion of income, taxes on gambling fall most heavily on poor people. Taking all games together, gambling is about the same as sales taxes in this regard. Some individual games, including the most popular, impose an even heavier burden on poor people. As a source of revenue, state lotteries are almost twice as regressive as sales taxes. A legalized numbers game would be even more regressive.

■The incidence of compulsive gambling in the United States was estimated at approximately 0.7 percent overall (1.1 percent of males and 0.5 percent of females). An additional 2.3 percent were classified as potential compulsive gamblers. In Nevada, the estimated incidence of actualized compulsive gamblers was 2.6 percent. These findings were made largely on the basis of clinical analysis of interviews. The data tend to support the contention that widespread legalization of gambling in the nation may result in a significant increase in the incidence of compulsive gambling.



OBJECTIVES

The objectives of this report, prepared for the Commission on the Review of National Policy Toward Gambling, are to describe the nature and scope of gambling activities in the United States and to provide insights into the mechanisms that govern that phenomenon which might be taken into account in deciding whether to maintain present public policies or change them.

As specified by contract, this report, together with the complete Tabular Report issued on February 15, 1976, contains:

A description and analysis of American gambling behavior and attitudes including:

- (a) The rates of participation in 40 games
- (b) A description of attitudes toward legalization of 13 games
- (c) Estimates of the incidence of any gambling taxes, direct or indirect, on particular economic and demographic groups
- (d) An analysis of the dynamics of gambling
- (e) Estimates of gambling expenditures
- (f) A detailed description of participation and wagering in the following activities: numbers, state lotteries, betting on horse races, commercial betting on sports events, playing bingo, and casinos
- (g) A report on "problem gambling" in the United States which includes estimates of the number of individuals in the United States who may be described as gambling to such an extent that they may be deemed to be

harming themselves and/or society.

(h) A Tabular Report of the questions administered to the Nevada sample with analysis of differences in gambling behavior between Nevada and other parts of the United States

(i) Projections of how betting behavior is likely to be affected by prospective policy changes

(j) Estimates of the potential government revenue to be generated by various prospective policy changes

(k) A detailed description of the methods used both in gathering the data and in producing the estimates and analyses described

INTRODUCTION

The data reported in this study were gathered from the American public in a comprehensive and systematic survey conducted in 1975. It has always been assumed that gambling, like sex and alcohol consumption, is a sensitive and controversial subject about which people will not talk openly and at length. Interviews with more than 2,000 people who each spent an hour to an hour and a half talking about what games they played for money, how much they spent on each game, why they spent their money in this way, and what they thought about legalization of gambling, make it safe to say that gambling, whatever it may have been in past years, is now a socially acceptable topic which people will freely discuss.

One thing that facilitated the data collection was the organization of the interview itself. It began by questioning respondents about what they do for recreation, additionally eliciting how much they spent on recreation and vacations, thus acclimating them to provide financial information on an innocuous topic. They were then led to discuss their exposure to other people's gambling behavior--first while they were children and then, now. Next they were asked about the gambling laws in their state and their desire for or opposition to legalization of different games of chance, and only then were they questioned about what games they bet on, how often they bet, and how much money they wagered.

Even here, where detailed dollar figures were required, the subject was approached slowly by first inquiring about availability of gambling

in a variety of ways. For each of the six games about which detailed descriptions of participation and wagering were required, a different sequence of questions was developed from knowledge of betting patterns of these games provided by the exploratory group work that preceded the national survey.¹

In questions on various types of betting each game was referred to by name, i.e., "lotteries," "bingo," "casinos," "numbers," "sports cards," "betting on a horse with a bookie," etc., not by category such as "legal commercial games," "illegal games," "friendly" bets, and so on. It was only during the period of data analysis that the definitions "illegal," "legal commercial," "friendly," etc. were affixed to the appropriate sets of games. In fact, the word "illegal" did not appear in the questionnaire at all. The respondent was never asked what "illegal" forms of gambling he participated in, nor how much money he bet "illegally." The total picture of participation in illegal gambling, and the dollar figures involved, were drawn from numerous individual questions on types of gambling known to the analysts to be illegal, but never designated as such in the questionnaire.

Although there is a possibility that some respondents were not truthful in whole or part, it can be reported that they answered without hesitation. In any case, it is extremely difficult to lie successfully for an hour and a half to an interviewer professionally trained to detect evasive efforts and to note any reservations about the sincerity

1. See Appendix A: Procedures.

of responses on the interview schedules.¹ Evasive responses were reported for less than one percent of the sample.

The function of a survey is to collect data that is not available from other sources--it answers the questions "how many?," "who?," and "why?." For example, public records indicate that \$681 million dollars were spent in 1974 on lottery tickets but some people buy more than one ticket and it is impossible to tell from those records how many people buy them or who or why. In contrast, survey information allows one to examine relationships between participation and other factors such as income or age, and shows how these affect volume of betting. None of these can be ascertained from such detailed public records as those kept at horse tracks. The opportunity to study cross-relationships in the survey method is also a valuable tool in assessing the quality of the data. It enables one to observe whether reported gambling behavior is consistent with other measures of behavior. Likewise, relations between variables are subject to smaller reporting errors than most absolute measures.

Estimates of aggregate dollars wagered at horse tracks, on bingo, on lottery tickets, on OTB in New York, and on casinos were compiled from the sample and compared to figures published by official bodies regulating these legal gambling activities. Averaging over all six games, the estimate derived from the survey data collected was within .01 percent of the total of the six official estimates. The close correspondence of the estimates was not expected. It had been presumed that the survey data would underestimate the real handle due to reluctance to report, faulty memory, or to

1. See Appendix D: Questionnaire, p. 136, questions Y-11.

the difficulty of including in the sample proper representation of gamblers who wager very large amounts. In fact we collected this detailed information on legal games partly in anticipation of using the expected discrepancy as a blow-up factor for the illegal handle which was expected to be subject to the same difficulties. However, the results gave no reason to question data on illegal handle. Although it cannot be assumed that the validation of the legal handle automatically validates the illegal handle (or the other data presented in the text), the weight of this evidence added to the consistency of the findings provides some assurance of their accuracy.

CHAPTER ONE

GAMBLING PARTICIPATION

Sixty-one percent of all adult Americans placed some kind of bet in 1974, but some of these were "friendly" bets with co-workers, neighbors, or other friends. Forty-eight percent of the population, however, said they placed bets on one or more of the 12 popular forms of commercial gambling including four illegal games, wagering a total of \$22.4 billion during the year.¹ This wagering amounted to an average of almost \$150 per person aged 18 or older in the entire population. When the 52 percent of the people who did not bet on these commercial forms are excluded, we estimate 69 million Americans ventured an average of \$387 in a year. However, the distribution of bets is skewed. Over half of these commercial bettors bet less than fifty dollars over the year, around a fifth bet between \$50 and \$100 a year, and only 14 percent bet over \$200 a year. Thus we can see that a small proportion of the bettors accounts for a large proportion of the total dollar volume wagered on gambling games.

1.1 Patterns of Participation

Betting is not confined to a few groups or a few areas. Betting is a universal phenomenon in the United States. A sizable majority of adults in most major subgroups say they bet--men and women, whites and non-whites, from one ocean to the other. Indeed, less than 50 percent participation

1. The 12 types of commercial gambling included in the participation rates are: horse races, casino games, bingo, state lotteries, dog tracks, jai alai, OTB in New York, pickit in New Jersey, sports books, horse books, numbers, and sports cards. Three games are excluded from the wagering estimates. They are: dog tracks, jai alai, and pickit.

Table 1.1-1

Reported Betting Participation by Demographic Characteristics

		Total Sample	Never Bet	Current Non bettor	Current Bettors						
					Any	Legal	Only Legal	Only Friends	Illegal	Heavy Illegal ²	
						Commercial	Commercial				Friends
Total Sample	%	100	32	39	61	44	7	50	13	11	3
Male	%	46	25	32	68	47	5	60	16	17	5
Female	%	54	39	45	55	42	9	42	10	5	1
White	%	85	31	38	62	45	7	52	13	10	2
Non-white	%	13	39	48	52	38	8	38	8	17	5
18-24 years	%	14	25	27	73	48	6	65	20	15	3.1
25-44 years	%	43	26	31	69	52	6	59	13	14	3.1
45-64 years	%	31	33	40	60	42	10	44	12	8	2.8
65 + years	%	12	65	77	23	17	5	15	5	2	*
Employed	%	60	23	29	71	50	7	61	16	15	4
Unemployed	%	4	25	31	69	54	2	61	8	15	4
Under \$5,000	%	13	66	76	24	17	3	18	4	3	*
\$5,000-\$10,000	%	18	42	49	51	39	6	43	10	8	2.4
\$10,000-\$15,000	%	22	24	31	69	46	10	51	19	10	2.6
\$15,000 +	%	41	21	26	74	54	7	63	15	15	3.3
Married	%	75	31	38	62	44	7	51	14	11	2.5
Divorced/Seperated	%	7	23	29	71	57	5	55	7	16	6.6
Widowed	%	7	72	82	18	16	6	11	2	2	*
Never Married	%	12	27	30	70	53	9	59	14	15	2.6
Did not graduate high school	%	32	49	59	41	30	7	30	7	8	2
High school graduate	%	31	29	34	66	48	9	53	14	12	3.5
Some college	%	21	22	28	72	52	4	64	16	13	3.7
College graduate	%	16	18	21	79	56	8	67	18	11	1.3

Table 1.1-1 (continued)

Catholic	%	27	17	20	80	65	11	63	14	16	4
Protestant	%	66	38	46	54	36	5	45	11	9	2.4
Presbyterian, Lutheran, Congegational, Episcopal	%	16	20	26	74	51	7	64	21	10	2.7
Bible oriented sects	%	11	57	67	33	19	6	25	9	8	2.2
Methodist	%	13	30	37	63	41	3	53	15	11	2.2
Baptist	%	19	47	55	45	30	4	37	11	10	2.8
Jewish	%	2	23	23	77	66	7	66	8	19	2.1
Athiest, no preference	%	4	44	60	40	33	3	36	5	5	.2
West European	%	40	23	30	70	49	7	59	17	11	2.4
East European	%	9	18	19	81	65	9	68	13	14	2.0
British	%	30	29	38	62	44	7	52	14	8	.6
Irish	%	22	26	35	65	47	7	56	14	10	2.4
Spanish speaking	%	4	33	39	61	51	6	47	3	19	5.6
African	%	5	37	46	54	42	6	41	9	13	5.0
Italian	%	6	20	23	77	64	15	61	7	18	7.8
All others	%	21	51	59	41	29	7	31	8	9	2.3
Northeast	%	23	17	20	80	67	8	67	8	19	6
North Central	%	28	28	34	66	48	9	48	15	12	3
South	%	31	52	60	40	23	5	31	12	6	1
West	%	18	24	35	65	47	7	56	17	7	*
City 100,00 or more	%	27	28	34	66	46	7	54	14	15	5
Suburb of city over 500,000	%	23	23	28	72	56	7	59	12	14	3
Small cities, rural	%	51	39	47	53	38	7	43	12	7	1
25 or less miles from 25 largest cities	%	33	28	33	67	49	8	53	12	15	4
26-44 miles from 25 largest cities	%	12	20	24	76	57	2	69	16	15	4
50 miles or more from 25 largest cities	%	55	38	46	54	39	7	44	12	8	2

Note: Percentages read across the table.

*Less than one half of one percent.

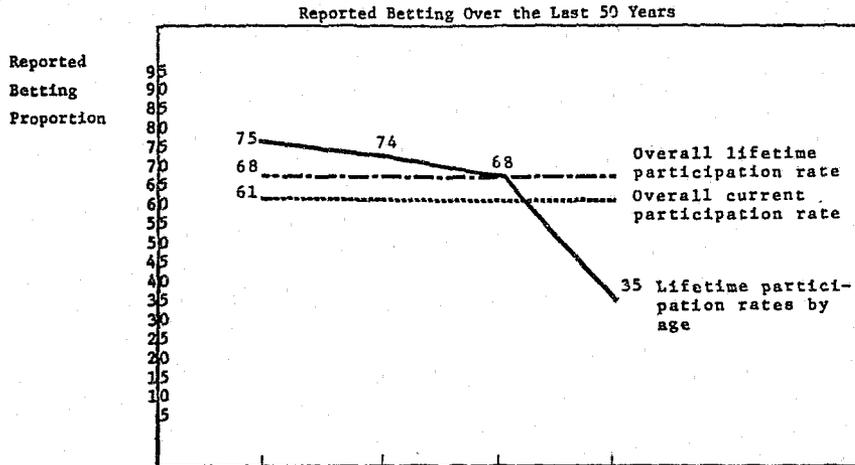
^aRespondents wagering more than \$200 a year on illegal gambling.

is found only among people over 65, people with incomes under \$5,000, the widowed, those who did not graduate from high school, members of Bible-oriented fundamental sects, and Southerners, with substantial overlapping among these groups.

Despite a substantial level of participation in all groups, there are meaningful differences. More males say they bet than females (68 percent vs. 55 percent). Bingo is the only gambling game with higher reported female participation (62 percent vs. 52 percent). Participation is higher among whites than blacks and other racial mixtures, but game for game there are variations in this pattern. For example, blacks and others participate more than whites in playing the horses and trips to casinos, and when they do so they tend to bet more. Suburbanites report betting more (72 percent) than those living in large urban areas (66 percent), while urban dwellers bet more than those living in areas of lower concentration (53 percent). Betting is progressively more prevalent as one approaches the 25 largest cities, peaking at 76 percent participation in the suburban belt 25-49 miles out, and then dropping slightly to a 67 percent participation rate within a 25 mile radius.

Betting is almost omnipresent in the Northeast quadrant of the United States, where 80 percent of the sample say they have bet. The South has the lowest reported participation rate in the nation (40 percent). The higher the income and education, the more likely the individual is to bet. Single people, with the exception of widows and widowers, reported more betting than married folk (70 percent vs. 62 percent). The widowed are least likely to bet (18 percent).

Figure 1.1-1



Age Range	18-24	25-44	45-64	65-over
Midpoint	20	35	55	70
Year group was 20	1975	1960	1940	1925
Lifetime Participation	75%	74%	68%	35%
1974 Participation	73%	69%	60%	23%
Loyalty Ratio ^(a)	.97	.93	.88	.65

(a) Proportion who have ever bet who bet in 1974

Table 1.1-2

Distribution of 1974 Betting Volume

	Total Sample	Bettors On 10 Principal Commercial Games
	%	%
Light bettors (\$-\$50 a year)	24	55
Moderate bettors (\$51-\$200 a year)	9	19
Heavy bettors (over \$200 a year)	6	14
Not ascertained	5	12
Bets on commercial games for which no wagers were asked	4	--
Bets with friends only	13	--
Non-bettors	39	--

Generally speaking the employed bet only very slightly more than those unemployed and looking for work.¹ Catholics (80 percent) followed closely by Jews (77 percent) are more likely to bet than Protestants as a whole (54 percent), but there are significant differences among Protestant denominations: Presbyterians, Lutherans, Congregationalists and Episcopalians are not unlike Jews in their higher participation in betting activities (74 percent). Well over half of all Methodists say they bet (63 percent), while Baptists (45 percent) and Bible-oriented sects (33 percent) are more likely to be non-bettors. This is not surprising since religious teachings against gambling are strongest in those groups. What is surprising is that only 40 percent of those brought up with no religious preference say they bet.

There are many preconceptions about the gambling habits of people of different ethnic origins. Our results indicate that there is more betting among those of East European backgrounds (81 percent), of Italian backgrounds (77 percent), and West European backgrounds (70 percent), and less betting among those from Ireland (65 percent), Britain (62 percent), Spanish-speaking countries (61 percent), and Africa (54 percent). (Table 1.1-1)

The high gambling participation rate of 61 percent appears to be a relatively new phenomenon in American life. If this had been the average participation rate for the last 50 years or so, we would find the percentage of people who had bet in their lifetime rising with age because older people have had more years to accumulate gambling experiences. Instead we find that the frequency of lifetime gambling decreases with

1. Labor force status at time of interview (Summer, 1975)

age. While it is possible that the lower participation rates for older people are the results of more forgetting, it is improbable that such large differences reflect only memory differences. Knowing that participation peaks in the 18-24 year range and then declines, we can use lifetime participation rates for each age range as a proxy for participation at age 20 for each age group. Figure 1.1-1 illustrates this function and suggests that the beginning of the United States gambling phenomenon as we know it today, was established in the World War II period and is continuing to rise slowly.

Gambling is a young person's pursuit. This implies not only that betting participation in a given year goes down as age goes up, but that the ratio of loyalty decreases as well, making it probable that subsequent generations which are exposed to gambling early and start early may not have a rate of decline as steep as we observe now. However, cross-generational analyses are difficult without both longitudinal and cross-sectional data. It may turn out that betting, once part of early learning, will modify the age response we observe.

There are three major avenues for gambling: legal commercial gambling, gambling among friends, and illegal gambling. Forty-four percent stated they used at least one of the legal commercial outlets, while 50 percent said they bet with friends and 11 percent bet on at least one of the illegal games. The total of these percentages exceeds 100 because some people used more than one channel. In all, 48 percent bet commercially on something legal or illegal. But some people wager only small amounts and others wager considerably more. Twenty-four percent wagered

less than \$50 a year, nine percent wagered between \$51 and \$200 a year, six percent wagered more than \$200 a year, and four percent bet on commercial games about which we did not collect wagering information while we were unable to ascertain the total wagers for five percent of the sample. Of those who placed commercial bets on at least one of the 10 games for which we collected wagering information, 55 percent bet less than \$50 over a year, around a fifth wager \$51 to \$200, and 14 percent wager over \$200 a year. For ease of discussion we will call those who wager less than \$50 a year light bettors, those who wager \$51 to \$200 a year moderate bettors, and those who wager over \$200 a year, heavy bettors. (Table 1.1-2)

Compared to other groups of bettors, heavy bettors contain proportionately more men, more non-whites, more people 25-44 years of age, more people with incomes over \$15,000 a year, more divorced and separated individuals, more people without college educations, more Catholics, and more people with Italian and African ancestry. (Table 1.1-3)

Furthermore, we find heavy bettors are located in greater proportion within 25 miles of our 25 largest cities, in the Northeast part of the country, and in states with horse tracks and/or a lottery.

Two thirds of the heavy bettors place bets at horse tracks compared to 23 percent participation among bettors in general. They also participate to a greater extent in betting on college sports, bingo, lotteries, and dog tracks. Approximately half of the heavy bettors bet on some illegal game. Somewhat less than a quarter participate in each of the major illegal activities: betting on horses with a bookie, betting on sports with a bookie or on a sports card, and playing the numbers. (Table 1.1-3a)

Table 1.1-3

Demographic Characteristics of Three Betting Volume Groups

	Total Bettors %	Light Bettors (\$1-50 a year) %	Moderate Bettors (\$51-200 a year) %	Heavy Bettors (Over \$200 a year) %
<u>Sex</u>				
Males	52	49	50	60
Females	48	51	50	40
<u>Race</u>				
White	87	89	86	75
Non-white	11	9	10	23
Not ascertained	2	2	4	2
<u>Age</u>				
18-24 years	16	17	16	10
25-44 year	48	47	45	56
45-64 years	31	31	32	31
65 years or older	5	5	7	3
<u>Employment status</u>				
Employed	70	66	71	70
Not employed	5	6	6	5
Not in labor force	25	28	22	25
<u>Income</u>				
Under \$5,000	5	5	6	7
\$5,000-\$10,000	15	15	16	13
\$10,000-\$15,000	25	25	22	20
Over \$15,000	49	49	52	54
<u>Marital status</u>				
Married	77	79	74	70
Divorced or separated	8	6	7	17
Widowed	2	2	3	5
Never married	13	13	16	8
<u>Education</u>				
Less than high school	22	23	26	28
High school graduate	33	30	39	39
Some college	24	23	18	23
Graduated college	21	24	17	10
<u>Religion</u>				
Catholic	35	40	45	40
Jewish	3	4	5	1
Protestant	59	54	48	53
<u>Ethnic background</u>				
West european	46	43	48	39
East european	13	16	12	15
British	31	32	23	19
Irish	23	26	20	17
Spanish-speaking	4	4	3	4
African	4	3	5	8
Italian	7	7	10	15
Other	14	15	13	18

Table 1.1-3a

Regional and Betting Characteristics of Three Betting Volume Groups

	Total Bettors %	Light Bettors (\$1-50 a year) %	Moderate Bettors (\$51-200 a year) %	Heavy Bettors (Over \$200 a year) %
<u>Region</u>				
Northeast	30	38	40	45
North central	31	35	30	22
South	20	15	13	15
West	19	12	17	18
<u>Distance from 25 largest cities</u>				
Less than 25 miles	37	34	36	52
25-49 miles	14	15	16	16
50 or more miles	49	51	48	32
<u>Legal games in states</u>				
Lottery	50	65	64	60
Bingo	60	65	62	53
Horse tracks	75	78	86	85
Dog tracks	18	14	21	13
<u>Games bet on</u>				
Horses at the track	23	19	51	67
Sports (friends and illegal)	46	43	49	50
College sports (friends and illegal)	20	18	24	34
Casinos	16	13	21	23
Bingo	31	40	50	55
Lotteries	40	62	63	53
Dogs at the track	6	5	12	11
Horses with a bookie	4	3	3	24
Numbers	5	3	7	24
Sports (bookie or cards)	6	6	14	22
Sports cards	5	6	9	14
Any illegal	18	17	28	49

Table 1.1-3b

Percentage Distribution of Bettors by Annual Wager for Selected Games

Dollars Per Year \$	Horses At Track %	OTB %	Lottery %	Bingo %	Legal Casinos %	Horse Books %	Sports Books %	Sports Cards %	Numbers %	Total Illegal
Under 25	24.1	20.8	64.6	50.0	13.6	36.8	20.9	57.5	40.4	
25-49	15.8	5.4	14.2	10.4	9.4	5.7	17.1	21.7	7.5	
50-99	13.3	15.7	15.1	5.2	7.1	10.2	16.1	7.7	1.3	
100-199	20.3	16.4	4.2	7.3	10.6	10.9	5.7	6.2	8.8	
200-499	7.0	19.1	0.9	5.7	21.1	10.2	12.5	0.8	6.6	
500-999	5.1	7.5	--	2.6	8.0	9.1	6.7	0.8	5.4	
1000 or more	8.2	13.0	--	0.5	7.9	8.7	9.1		6.6	
No answer	6.2	2.1	1.0	18.5	22.3	8.4	11.9	4.9	23.4	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Median Bet	\$53	\$110	\$10	\$14	\$150	\$60	\$60	\$12	\$25	\$25

Moderate bettors have a demographic profile similar to bettors in general with some exceptions. They, like heavy bettors, tend to consist of fewer people with college educations, more Italians, and more Catholics; but, unlike the heavy bettors, they have a larger proportion of Jews and people who have never married than is found in the general population of bettors. Like heavy bettors they are found more in the Northeast part of the country and in states with race tracks. Their betting participation pattern deviates from the general bettor population in the same respects as does the pattern of heavy bettors, but never reaches the extremely high participation rates found among heavy bettors. There is one exception--lotteries: almost two thirds of moderate bettors play the lottery.

Light bettors, comprising 55 percent of total bettors, are similar to bettors in general in all important respects.

As shown in Table 1.1-4, betting patterns change with age. Illegal betting declines as a share of total betting as age increases. Today's young adults are more likely to bet with friends than on legal commercial games or on illegal games, but young people are also more likely than any other age group to engage in illegal betting. The use of commercial legal facilities increases with age, and those over 65 who bet at all are more likely to bet commercially than with their friends.

Looking strictly at the bettors, we find that 73 percent reported using a legal commercial channel, 82 percent said they bet with friends, and 18 percent reported illegal betting. There is, of course, substantial overlap. People who use commercially available legal games are somewhat more likely to gamble illegally as well, and illegal bettors are

Table 1.1-4

Lifetime and 1974 Distribution of Bettors Among Betting Channels, by Age

	<u>Total</u>		<u>18-24</u>		<u>25-44</u>		<u>45-64</u>		<u>65+</u>	
	Life	74	Life	74	Life	74	Life	74	Life	74
	%	%	%	%	%	%	%	%	%	%
Legal commercial	43	42	40	37	43	42	43	45	44	50
Friends	41	48	46	51	42	47	40	47	38	44
Illegal	16	10	14	12	15	11	17	8	18	6

Table 1.1-5

Betting Channel Combinations

	<u>Total</u>	<u>Total</u>	<u>Total Legal</u>	<u>Total</u>
	<u>%</u>	<u>Bettors</u>	<u>Commercial</u>	<u>Illegal</u>
		<u>%</u>	<u>Bettors</u>	<u>Bettors</u>
			<u>%</u>	<u>%</u>
Legal commercial	<u>44.3</u>	<u>72.7</u>	<u>100.0</u>	<u>81.3</u>
Exclusively	7.0	11.5	15.8	0
Combined	37.3	61.2	84.2	81.3
Betting among friends	<u>50.0</u>	<u>82.0</u>	<u>80.3</u>	<u>93.3</u>
Exclusively	12.7	20.8	0	0
Combined	37.3	61.2	80.3	93.3
Illegal betting	<u>10.9</u>	<u>17.9</u>	<u>20.0</u>	<u>100.0</u>
Exclusively	0.1	0.2	0	1.1
Combined	10.8	17.7	19.8	98.9

the heaviest users of legal channels and also bet more with friends than anyone else. (Table 1.1-5) Nevertheless, there is a great deal of exclusivity in betting. Seven percent of the population say they bet only through legal commercial channels, that is 11 percent of all bettors and 15.8 percent of all legal commercial bettors. Within the five game legal commercial framework (horses and dog tracks, lotteries, bingo, and casinos), more than half of the bettors report betting on only one of the five games. The games which draw the heaviest exclusive participation are bingo and lotteries, but there are large sex differences. Lotteries have an exclusive hold on 31 percent of the male commercial bettors and 9 percent of the female commercial bettors, while bingo has an exclusive hold on 18 percent of the female commercial bettors and only nine percent of the male commercial bettors.

Thirteen percent of the population indicated that they bet only with friends. Three-quarters of people who bet with friends also report betting commercially either legally or illegally. This compares to a 61 percent participation rate for the country and is indicative of the way commercial gambling spreads. Twenty-one percent of the total betting population is comprised of those who only bet with friends.

Despite general exclusivity, very few people say they bet illegally to the exclusion of other channels of betting--only one-tenth of one percent overall, and 1.1 percent of all illegal bettors. Ninety-three percent also bet with friends and 81 percent bet on legal games. However, within the four-game illegal framework consisting of sports books, sports cards, numbers, and horse books, there is a great deal of exclusivity.

Forty-four percent of illegal bettors say they confine their illegal betting to only one of these four games. This exclusivity pattern is much stronger among males than females overall, but numbers attract a greater proportion of women. Twenty-eight percent of women who bet illegally, bet only on the numbers which compares to 12 percent for men. On the other hand, sports cards have a large exclusive hold on 20 percent of male illegal bettors. Sports and horse books have much less exclusive hold, but 10 percent of males who bet illegally use horse books to the exclusion of other illegal games, whereas only one percent of women do. (Tables 1.1-5 through 1.1-8)

Participation in particular gambling games or betting activities varies from 38 percent participation to one-tenth of one percent. Forty gambling activities are listed on Table 1.1-9 with participation rates for lifetime and for 1974. Some activities seem to be gaining in share of total betting while others are waning. Playing card games with friends is rising and remains the single most popular betting activity, but lottery participation is rising faster because very few people had a chance to bet on lotteries prior to 1964. Other games and events which appear to be on an upturn in terms of share are: sports cards, betting on most sports with friends, miscellaneous event betting, betting on tennis or golf games among friends, betting on backgammon, legal off-track betting, betting on college basketball with a bookie, and betting on pool or billiards. Games which seem to have less share now than earlier are: casinos, dice games, bingo, horse races, pinball, dog tracks, betting on chess, checkers or dominoes, numbers betting, Jai Alai, betting on baseball, that is, other than pro-baseball among friends. (Table 1.1-9)

Table 1.1-6

Exclusive Betting Among Total Sample, and Bettor Groups

	Exclusively Bet one Legal Game to the Exclusion of other Legal Games	Exclusively Bet one Illegal Game to the Exclusion of other Illegal Games	Exclusively Bet one Game to the Exclusion of 8 other Legal or Illegal Games
Total population	% 24.9	4.8	26.8
Males	% 25.7	8.3	29.1
Female	% 24.0	1.8	24.7
Total bettors	% 40.8	7.8	43.9
Male bettors	% 19.5	8.3	45.2
Female bettors	% 44.0	1.8	42.6
Total legal commercial bettors	% 56.0	---	--
Male commercial bettors	% 54.4	--	--
Female commercial bettors	% 57.2	--	--
Total illegal bettors	% --	43.8	--
Male illegal bettors	% --	47.2	--
Female illegal bettors	% --	34.2	--

Table 1.1-7

Exclusive Participation Among Legal Commercial Games

		Only Form of Legal Commercial Gambling				
		Horse Track	Casino	Bingo	Lottery	Dog Track
Total Sample	%	3.8	3.0	6.0	11.1	1.0
Total legal commercial bettors	%	8.5	6.7	13.5	25.1	2.2
Total bettors	%	6.2	4.8	9.8	18.2	1.6
Males in total sample	%	3.1	2.4	4.1	14.8	1.3
Male commercial bettors	%	6.7	5.1	8.6	31.3	2.7
Male bettors	%	4.6	3.6	5.9	21.6	1.9
Females in total sample	%	4.3	3.4	7.6	8.0	0.7
Female commercial bettors	%	10.3	8.1	18.1	19.1	1.6
Female bettors	%	7.9	6.2	13.9	14.7	1.3

Table 1.1-8

Exclusive Participation Among Illegal Games

		Only Form of Illegal Gambling			
		Horses with bookie	Numbers	Sports with bookie	Sports Cards
Total sample	%	0.8	1.8	0.6	1.6
Total illegal bettors	%	7.6	16.2	5.2	14.8
Total bettors	%	1.3	2.9	1.0	2.6
Males in total sample	%	1.7	2.1	1.0	3.5
Male illegal bettors	%	9.7	12.0	5.6	19.9
Male bettors	%	2.5	3.1	1.4	5.1
Females in total sample	%	0.1	1.5	0.2	0.0
Female illegal bettors	%	1.4	28.4	4.0	0.0
Female bettors	%	0.1	2.7	0.4	0.0

Note: Percentage read across the table.

1.2 Gambling Among Friends

All in all, betting among friends holds the largest share of all betting activities. Half the adult population reported placing at least one bet with friends last year. The most popular kind of betting among friends is card games (38 percent), followed by pro-football (20 percent) and pro-baseball (18 percent). The next two are sufficiently unusual to merit more detailed discussion. Almost one-sixth of the United States population said that they bet whether some event would happen or where it would happen. For example, the hour of someone's birth, the first snowfall, whether someone would resign--or the date of that resignation--and similar events. More than 10 percent of adult respondents said they bet in a check pool at work. This takes many special formats, but essentially the rules are the same. The number on the paycheck is multiplied by the time of day or temperature, and the number closest to the sum of the day, month, and year is the winner. Half of the people who bet on their pay checks say they do it on every pay check. Unfortunately, we do not know the amount of those wagers, but exploratory group interviews indicated it normally ranges from \$1 to \$10 and sometimes higher. Pool and billiards are other popular games providing an opportunity for betting (11 percent). Next comes college football also at 11 percent, betting on prize fights or wrestling matches at eight percent, dice games at eight percent, and bowling at seven percent.

Males report betting among themselves on each and every gambling activity to a significantly greater extent than females do (60 percent vs. 42 percent), but male participation is even more dominant in betting on sports among friends.

Table 1.1-9

Lifetime and 1974 Betting Participation

	Lifetime		1974		Holding Power %
	%	% Share	%	% Share	
Card games with friends	52.8	11	38.4	16	72
Lottery ticket	30.0	6	24.1	10	80
Professional football with friends	25.8	5	20.2	8	77
Bingo	43.9	9	18.7	8	44
Professional baseball with friends	25.7	5	17.7	7	70
Horse races	34.6	7	13.9	6	43
Miscellaneous events	22.1	5	14.8	6	68
Pool, billiards	18.3	4	11.3	7	61
Check pool	22	5	11.2	7	50
College football with friends	17.8	4	11.1	7	61
Casinos	26.7	6	9.4	4	27
Fights or wrestling with friends	13.7	3	7.7	3	57
Dice	20.8	4	7.6	3	38
Bowling	13.2	3	7.2	3	54
Professional basketball with friends	8.8	2	6.3	3	66
Illegal card games	11.7	3	5.9	3	50
Pinball	14.6	3	5.6	2	40
College basketball with friends	8.7	2	5.0	2	55
Tennis, golf with friends	6.2	1.3	4.7	2	83
Auto racing	7.1	1.5	4.1	2	57
Dog tracks	14.4	3	3.9	2	29
Chess, checkers, dominoes	7.2	2	3.7	1.5	57
Sports cards	3.1	0.6	3.0	1.2	1.00
Numbers	7.2	1.5	3.0	1.2	43
Hockey with friends	4.5	0.9	2.5	1.0	55
Jai lai	6.4	1.3	2.4	1.0	37
Horses with bookies	7.3	1.5	2.4	1.0	33
Elections	9.1	2	2.3	1.0	22
Professional football with bookie	3.2	0.7	1.8	0.7	56
Backgammon	2.0	0.4	1.4	0.6	70
College football with bookie	2.4	0.5	1.1	0.5	46
College baseball with friends	2.7	0.6	1.1	0.5	41
Professional baseball with bookie	1.9	0.4	0.8	0.3	42
Fights or wrestling with bookie	1.2	0.2	0.6	0.2	50
Off track betting (legal)	0.8	0.1	0.6	0.2	75
Mahjong	1.2	0.2	0.5	0.2	42
Professional basketball with bookie	1.0	0.2	0.5	0.2	50
College basketball with bookie	0.6	0.1	0.4	0.2	66
Hockey with bookie	0.7	0.1	0.3	0.1	43
College baseball with bookie	0.2	*	0.1	*	50
Tennis or golf with bookie	0.2	*	0.1	*	50
	482.8		240.1		

*Less than one percent

We observed that half the United States population reported betting with friends, but there are some groups who do so less often than others.

The groups with somewhat less than 50 percent betting participation rates with friends are: women, non-whites, 45-64 year olds, those with incomes over \$5,000 but under \$10,000, Baptists, people with Spanish-speaking origins, people with African origins, those from small cities and rural areas, and those who live 50 miles or more from any one of the 25 largest cities.

Our figures show that those who rarely gamble with friends (or in any other way) are: people over 65 years, people with incomes under \$5,000, widows and widowers, non-high school graduates, members of Bible-oriented sects, and Southerners.

Thirteen percent of the population reports betting with friends exclusively. They are dissimilar to other people who bet with friends in two minor ways: those with incomes of \$5,000 to \$10,000 a year are more likely than those with higher incomes to be a "friend only" bettor and Protestants are more likely than Catholics or Jews to bet only with friends. Of course, in considering both of these exceptions we must remember that betting only with friends is a denial of commercial gambling, and as such is conceptually closer to non-gambling.

1.3 Legal Commercial Gambling

There are five major legal channels for gambling: horse tracks, state lotteries, casinos, bingo, and dog tracks.

Forty-four percent of all adult Americans said they wagered money in 1974 on one or more of the legally available commercial games. People



Table 1.3

1974 Commercial Game Participation

	Total Sample %	Legal					Illegal			
		Horses %	Lottery %	Bingo %	Casino %	Dogs %	Sports %	Horses %	Numbers %	Sports cards %
<u>Legal</u>										
Horses	14	100	25	28	38	45	43	63	45	37
Lottery	24	43	100	45	28	32	55	54	62	58
Bingo	19	37	35	100	35	42	35	39	34	32
Casinos	10	26	11	18	100	27	27	22	18	23
Dogs	4	13	5	9	11	100	23	8	5	19
<u>Illegal</u>										
Sports	4	12	9	7	11	23	100	45	25	100
Horses	2	11	5	5	5	5	27	100	34	25
Numbers	3	10	8	5	5	4	20	44	100	20
Sports cards	3	8	7	5	7	15	78	31	21	100
<u>Exclusive betting within five legal games</u>		27	46	32	31	25				
<u>Exclusive betting within four illegal games</u>							22	34	59	53
<u>Exclusive betting within eight commercial games</u>		26	43	30	29	22	20	25	15	36

who reported gambling on legal commercial games exhibit the same demographic profile as bettors in general with only minor variation. Our figures show that the unemployed are more inclined to bet commercially than the employed, that Jews are slightly greater participants than Catholics, and those from Spanish-speaking countries participate more in this kind of gambling activity than those from West European backgrounds.

On Table 1.3, we focus on bettors of specific commercial games.

Horse Tracks. Fourteen percent of the United States population said they bet on the horses at horse tracks. For 27 percent of those twenty million people, this was the only legal commercial game they indulged in, but as a group they are above average participants in all other legal and illegal commercial games.

State Lotteries. Although there are lotteries in only 12 states, this form of commercial gambling draws a projected 34.5 million people or almost a fourth of the United States adult population. The drawing power of lotteries is seen even better when we look at lottery participants who live in those 12 states. Almost one half of these lottery players said they play the lottery exclusively. Sixteen percent said they confine themselves to only legal commercial gambling. The largest overlaps with other gambling activities are the 35 percent of lottery players who also play bingo, and the 25 percent who also go to horse tracks. Lottery players have only average attendance at dog tracks or casinos, but they have above average participation in all four illegal games.

Bingo. Almost one fifth of the sample reported playing bingo for money. As a group, they are above average participants in all other legal and illegal games, but their illegal activity is not as extensive as other legal commercial betting groups. There is a very sizable overlap of bingo and lottery players. Eight percent of the sample or 14 percent of total bettors said they play both bingo and lotteries. On the other hand, around a third of all bingo players restrict their legal commercial participation to bingo alone, and 30 percent restrict their total commercial betting to bingo alone.

Casinos. Ten percent of the sample of the United States population, which projects to 14.4 million Americans, said they went to a gambling casino in 1974. As a group they are above average participants in all other games, but only slightly above average on lottery play and considerably below average for bettors as a whole. In fact, thirty-one percent of all people who went to casinos in 1974 engaged in no other legal gambling, and 27 percent engaged neither in other legal nor in any illegal game.

Dog tracks. Four percent of the sample said they bet at dog tracks in 1974. This amounts to 8.5 percent in states with dog tracks. Thirty-five percent of dog players do not play any other legal game. Dog players are also heavy horse players and heavy bingo players and have above average participation on all games both legal and illegal. The most startling finding is the large percentage of dog players who bet on sports with a bookie--23 percent.

Seven percent of the population or 16 percent of those who bet on these commercial games said they bet on nothing else. This suggests that there is a group of people whose gambling on legal games is directly stimulated by the existence of the game and by the attendant advertising. It represents neither an extension of gambling with friends into a commercial activity, nor the conversion of illegal gamblers into legal activity.

In contrast to legal commercial bettors in general, those who bet only on legal commercial games are quite a different group: almost twice as many women as men; more non-whites; disproportionately more people 45-64 years; three times more employed than unemployed; fewer divorced and separated; more high school only; fewer Jews than Catholics; almost twice as many Italians as any one other ethnic group; fewer from the Northeast and more from the North Central part of the United States; no differences between city size or type; and fewest from the 25-49 mile ring around large cities where most gamblers live. (Table 1.1-1)

1.4 Illegal Gambling

In 1974 eleven percent of the sample adult population, which projects to 15.8 million Americans, gambled illegally by placing bets with a bookie, on a sports card, on the numbers, or by playing at an illegal card parlor. Although by definition illegal gamblers are included with gamblers, they are a very different breed. Whereas all together there are only slightly more male than female gamblers, there are four times more male than female illegal gamblers. The proportion of illegal gamblers among

blacks and those with Spanish-speaking origins is double that found among other gamblers. Although gambling in general is most prevalent in the suburbs, illegal gambling is more prevalent in the central cities themselves. A larger proportion of Catholics gamble than any other religious group, but Jews gamble illegally more than Catholics do.

The most important subgroups in describing illegal gambling participation are those with Spanish-speaking origins, Jews, and Italians. They each have different betting patterns, but together they account for the highest participation rates in the three main illegal gambling games. (Table 1.4-1)

The Northeast is a hotbed of illegal gambling activity. Almost one fifth of all adults living in the Northeast said in 1974 they bet on at least one of the four illegal games we asked about. This compares to 12 percent in the North Central states, 7 percent in the West, and 6 percent in the South. Numbers is a bigger game than sports betting in the Northeast (8 percent vs. 6 percent). In all other parts of the country as well as nationally, sports betting is the biggest game. (Table 1.4-1)

Illegal gambling participation, like gambling participation in general, rises as income increases. Similarly it is engaged in most frequently by those who are single but not widowed. There is a slight deviation from the usual pattern on education. Illegal gambling is highest among high school graduates and those who have attended but not graduated from college. (Table 1.1-1)

Participation in legal gambling activity is associated with higher illegal gambling participation. Presumably one might not have considered bingo to be conducive to illegal gambling, but 20 percent of bingo players

Table 1.4-1

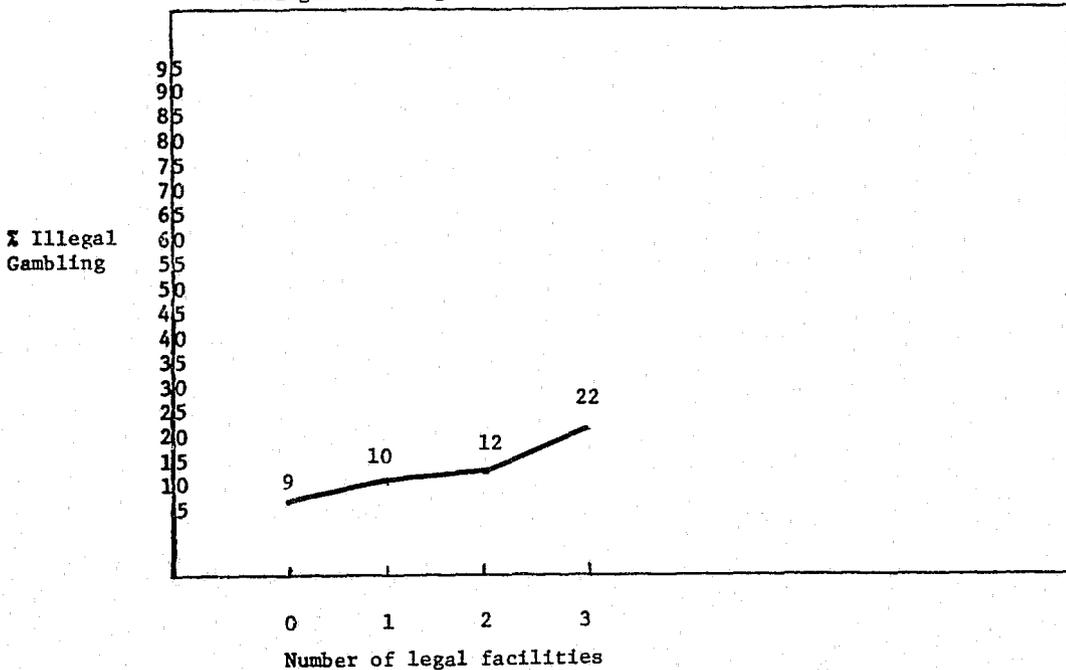
Differences in 1974 Illegal Gambling Activity
by Ethnic Origin and Region

		Any Illegal	Illegal Sports	Numbers	Illegal Horses
Total sample	%	11	4	3	2
Spanish speaking origins	%	19	3	9	5
Italian origin	%	18	8	10	9
Jewish origin	%	19	8	4	3
Northeast	%	19	6	8	6
North Central	%	12	5	2	2
South	%	6	3	1	1
West	%	7	1	1	1

Note: Percentage read across the table.

Figure 1.4-1

Illegal Gambling Participation by Number of Legal Facilities



did bet illegally and 20 percent of people who bet with friends, 30 percent of those who went to the horse tracks, and 38 percent of those who went to dog tracks, bet illegally which compares to 11 percent in the total population. (Table 1.3). Another way of observing this relationship is demonstrated in Figure 1.4-1 where we have plotted illegal gambling participation by number of legal facilities available. As we can see, in states which promote or allow promotion of legal gambling activity, illegal gambling participation is higher. Furthermore, in states where tracks are legal, and there is a direct counterpart, we observe more illegal gambling overall and specifically more betting on horses with a bookie. (Table 1.4-2)

Of the 15.7 million illegal gamblers in the United States, 39 percent or a projected 3.9 million spent at least \$50 over the year on such bets and may be classed as "heavy" illegal bettors.¹ These three percent of the United States population are different from bettors in general and from more casual illegal bettors. The group is composed mostly of males, more nonwhites, more people under 45, more divorced and separated, more Italians, more Spanish-speaking, more people living within the larger cities, and predominantly those living in the Northeast of the United States.

A tenth of one percent of the United States population engages exclusively in illegal betting, that is, by projection, less than 150,000 people in all. It is also a very small proportion of the illegal bettors. Eighty-one percent of all illegal game bettors also bet on legal commercial games and 93 percent bet with friends.

1. Illegal gambling activities include illegal card parlors as well as numbers, sports cards, sports books and horse books but wagers were not obtained for them. For the illegal games for which dollar wagers were obtained, 56 percent bet less than \$50 in 1974, 39 percent bet over \$50 and 5 percent did not provide dollar amounts. This amounts to 3.9 percent, 2.7 percent and 0.4 percent of the total sample respectively.

Table 1.4-2
Differences in 1974 Illegal Gambling Activity
by Legality of Horse Tracks

	Horse Track Laws		Total Sample %
	Legal States %	Non-legal States %	
Illegal gambling participation	11.5	9.5	10.9
Betting on horses with bookie	2.9	1.0	2.4

While there is a great deal of specialization within illegal betting, it is more common where the form of the bet is routine and where the game in effect comes to the player, as in numbers and sports card betting.

Only 3 percent of the population play the numbers, but 59 percent of all numbers bettors bet on no other illegal game. This is the highest exclusivity rate across any kind of game, legal or illegal. Fifteen percent bet on no other commercial game at all. When taken as a group, numbers players have above average participation in games of all kinds, and are heavy participants in the lotteries (62 percent) and many bet on horses with a bookie (34 percent).

The 3 percent of the sample, projecting to 4.3 million Americans who bet on sports cards, have above average participation rates in other games. Like all other illegal bettors they are heavy participants in lotteries (58 percent). On the other hand, sports cards players are another group with high exclusivity rates. Fifty-three percent of all sports card bettors engage in no other illegal activity while 39 percent engage in no other commercial gambling activity of any kind. (Table 1.3).

People who bet on sports illegally comprise 4 percent of the sample. This is made up of 3 percent who bet on sports cards and 2.6 percent who bet with a bookie. Essentially no one bets only on college sports with a bookie, but 0.7 percent bet only on pro-sports, while 1.9 percent bet on both pro and college sports. The most popular sport for betting is pro-football (1.8 percent); followed by college football (1.1 percent); pro-baseball (0.8 percent); pro-basketball (0.5 percent); college

basketball (0.4 percent); hockey (0.3 percent); and college baseball (0.1 percent). (Table 1.1-7)

Twenty-two percent of sports bettors restrict their illegal betting to sports. That is the lowest exclusivity rate for any game. Twenty percent say they bet on no other commercial game of any kind.

Sports bettors are the heaviest casino bettors and both groups of bettors have high socio-economic profiles. They are also the heaviest dog bettors; we noted that overlap in the profile of legal commercial dog-track bettors.

Only two percent of the sample, projecting to 2.8 million Americans, bet on horses with a bookie. Like other illegal bettors they have high overlap with numbers betting. At the same time, 34 percent of them said they bet on no other illegal activities and a quarter of them bet on no other commercial game. Surprisingly, only 63 percent of people who bet on horses with a bookie also visited the track.

1.5 A Multivariate Analysis of Economic and Demographic Factors Influencing Gambling

Like any other social phenomenon, gambling is affected by many other factors like religious training, ethnic background, and age, each modifying the behavior of the individual in a different way. For many policy purposes the influence of individual factors is less important than the sum total of their effect as they impinge on the behavior of particular groups. Thus in the earlier sections of this chapter we have described how observed gambling activity varies among religious groups, age groups, regions of the nation, and so on.

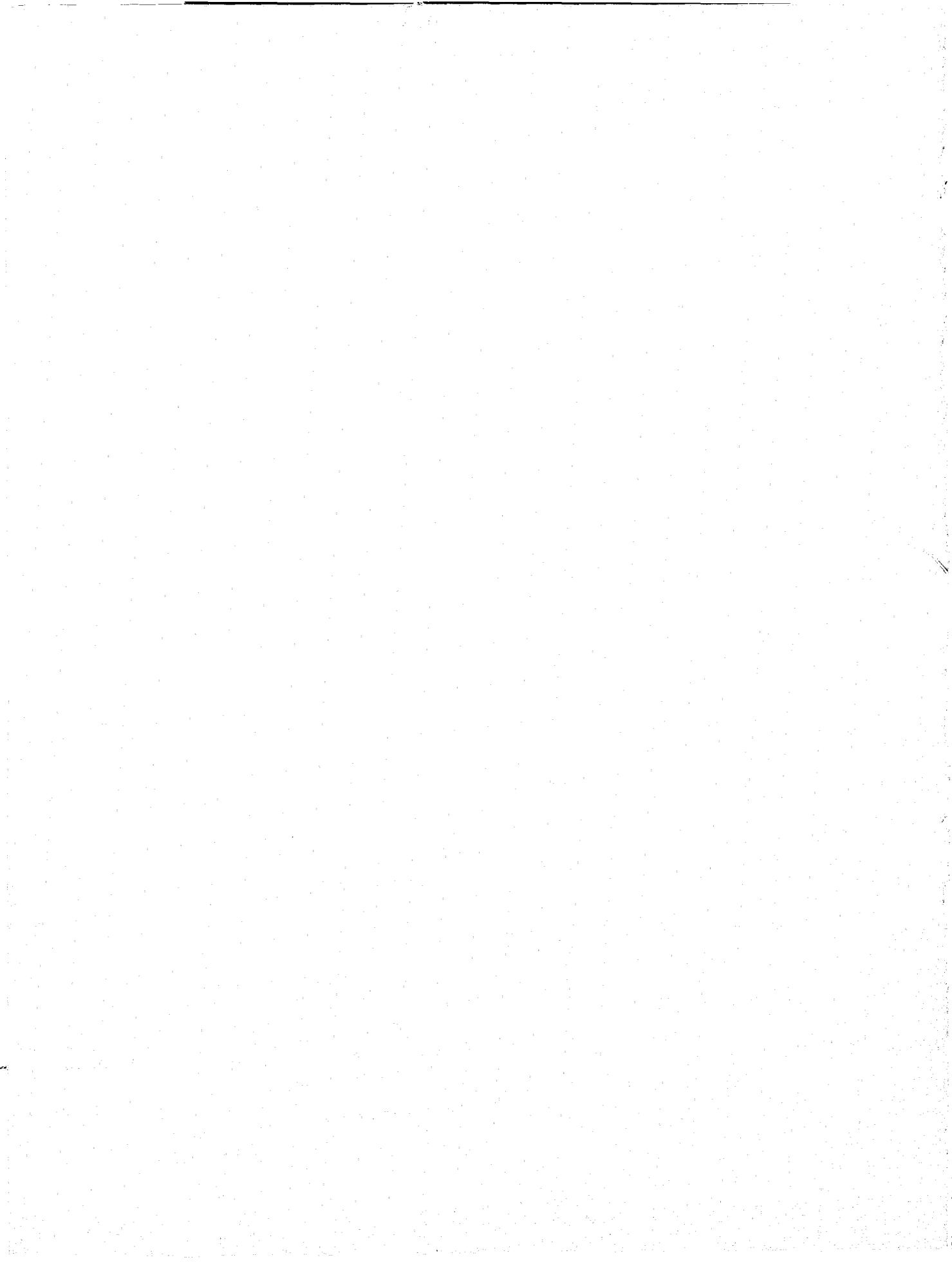


Table 1.5

Influence of Nine Economic and Demographic Factors on 1974 Gambling Participation

	LEGAL										ILLEGAL								
	Horses, Track		Casinos		Bingo		Lotteries		Dogs		Sports Books		Horse Books		Numbers		Sports Cards		
	unadj. %	adj. %	unadj. %	adj. %	unadj. %	adj. %	unadj. %	adj. %	unadj. %	adj. %	unadj. %	adj. %	unadj. %	adj. %	unadj. %	adj. %	unadj. %	adj. %	
Region																			
Northeast	20.1	13.8	8.7	6.0	25.4	21.3	55.3	38.9	4.9	3.1	3.0	2.2	5.6	4.2	8.1	8.0	4.7	3.8	
North Central	11.7	13.1	4.9	5.8	22.3	20.0	31.7	28.0	4.1	5.0	3.1	3.3	1.7	2.0	2.2	2.3	4.4	4.2	
South	9.5	14.2	1.7	3.5	11.2	14.0	6.0	17.5	3.2	3.9	1.0	1.6	1.5	2.2	1.1	1.6	1.8	2.7	
West	16.1	13.9	31.1	30.1	17.4	21.4	3.0	10.6	3.9	3.4	0.1	0.1	0.8	0.9	0.9	0.1	1.7	1.6	
Income																			
Under \$5,000	6.5	12.9	4.1	7.5	8.6	12.6	10.3	21.7	1.7	3.8	0.1	1.7	0.6	1.7	1.2	2.5	0.2	2.6	
\$5,000-\$10,000	11.9	14.2	8.1	9.4	18.8	17.9	15.1	20.2	2.9	3.8	1.3	1.8	1.9	1.8	3.6	3.7	1.8	2.4	
\$10,000-\$15,000	10.1	9.7	6.2	5.7	20.3	18.4	24.0	23.4	4.9	4.9	1.2	1.0	2.7	2.5	2.7	2.6	2.9	2.5	
\$15,000-\$20,000	16.3	13.7	12.3	11.1	21.6	19.9	31.0	26.3	2.9	1.9	2.6	1.9	3.1	2.7	3.4	3.0	4.9	3.9	
\$20,000-\$30,000	19.1	16.4	12.1	10.5	22.1	22.1	35.0	28.6	4.9	4.0	2.6	2.1	2.2	2.3	2.9	2.6	5.7	5.1	
\$30,000 and over	21.6	16.6	20.6	18.1	17.2	19.7	32.1	26.6	5.1	3.3	4.5	3.8	3.5	3.3	4.8	4.4	4.0	3.0	
No answer	17.1	19.3	6.5	8.2	19.8	22.7	23.8	23.7	7.4	8.4	2.8	3.0	2.5	2.9	2.9	2.7	2.4	3.1	
Education																			
Grade school	7.7	10.8	4.1	7.3	15.3	20.5	18.0	24.7	1.6	2.0	0.9	1.3	1.8	2.5	2.6	3.3	2.0	3.2	
High school	15.3	14.7	8.4	8.5	22.5	19.8	26.5	24.1	4.4	4.6	1.8	1.9	3.7	3.7	4.8	4.6	3.1	3.1	
Some college	14.0	12.4	14.7	11.9	21.1	17.8	25.5	24.1	5.0	4.3	3.0	3.1	2.2	1.7	2.8	2.4	4.3	3.6	
College degree	23.0	19.7	15.6	12.4	15.6	14.3	31.1	23.2	6.4	6.1	2.7	1.6	1.3	0.3	1.1	0.0	4.3	2.8	
No answer	12.9	5.6	9.0	1.7	9.0	19.4	2.3	25.6	0.0	2.6	0.0	0.3	0.0	1.6	0.0	3.5	0.0	3.2	
National Origin																			
African	17.5	19.3	5.2	8.9	23.3	24.6	26.8	27.3	5.1	4.9	0.2	0.3	1.9	1.6	6.1	5.3	0.4	0.2	
Spanish-speaking	24.7	19.4	21.2	16.9	15.2	8.9	16.6	10.6	3.6	4.5	1.5	1.9	5.6	4.7	10.4	9.5	2.3	0.8	
Italian	26.4	17.1	10.1	12.1	27.5	18.9	46.2	28.4	9.0	11.1	4.6	4.6	9.6	8.2	11.5	9.1	7.3	6.1	
Other	12.8	13.1	9.2	9.1	18.1	18.8	23.1	24.2	3.6	3.5	1.9	1.8	1.9	2.0	2.1	2.3	3.1	3.2	
Religion																			
Jewish	28.1	21.4	23.0	24.4	11.4	10.2	51.6	29.5	10.0	9.6	6.4	5.9	3.0	0.0	4.2	0.6	2.8	1.8	
Catholic	19.6	16.9	10.1	9.3	28.8	27.7	38.5	30.4	3.9	2.8	2.7	2.1	3.8	2.2	4.7	1.5	5.2	4.6	
Bible-oriented sects	7.0	9.5	4.0	6.3	9.1	10.8	5.0	16.7	0.4	1.1	1.7	2.3	1.8	2.9	1.7	4.1	1.4	2.1	
Other	11.9	12.9	9.7	9.6	16.4	16.5	20.4	22.6	4.4	4.8	1.4	1.6	1.8	2.5	2.4	3.5	2.6	2.8	
Age																			
Under 25	14.4	14.3	6.2	6.7	26.6	26.0	17.1	16.5	6.0	5.5	1.9	1.7	3.2	3.2	3.9	4.0	3.9	4.1	
25-44 years	17.4	16.0	11.7	10.2	21.0	20.1	30.0	28.6	5.0	4.9	2.5	2.5	2.9	2.8	3.7	3.5	4.3	4.3	
45-64 years	12.7	13.1	10.2	10.6	16.2	15.5	24.7	24.9	2.5	2.6	1.9	1.9	2.1	2.1	2.6	2.7	2.5	2.3	
Over 65 years	3.2	6.8	3.5	7.3	8.3	12.4	9.5	15.1	1.7	2.2	0.1	0.2	0.5	0.6	0.4	1.1	0.1	0.4	
Distance from 25 largest cities																			
Less than 25 miles	17.3	14.0	12.0	8.3	16.3	13.5	27.7	22.7	3.7	3.8	2.0	1.7	3.2	2.7	6.7	6.3	3.8	3.4	
25-50 miles	21.5	20.6	13.3	12.6	20.8	16.7	39.3	26.9	5.3	5.9	2.8	2.5	2.5	1.4	2.9	1.4	4.0	3.1	
Over 50 miles	10.0	12.1	7.1	9.5	19.7	22.3	18.8	24.4	3.8	3.6	1.7	1.9	1.8	2.4	0.8	1.3	2.6	3.0	
Sex																			
Male	15.7	15.5	8.8	9.2	16.0	16.1	28.6	28.3	6.0	6.0	3.7	3.7	4.2	4.4	3.9	4.1	6.7	6.7	
Female	12.0	12.2	10.2	9.7	21.1	21.0	20.3	20.6	2.1	2.1	0.3	0.3	0.8	0.6	2.2	2.0	0.1	0.1	
Perception of legality																			
Legal	18.2	16.8	26.1	18.5	24.8	23.0	47.6	37.2	10.3	10.7	0.7	0.1	8.7	7.8	4.7	1.1	2.1	2.0	
Illegal	7.3	9.4	9.0	9.2	9.2	12.0	6.1	14.2	2.4	2.3	1.9	1.9	1.7	1.8	3.0	3.0	3.2	3.2	

But it is also useful to attempt to disentangle the influences of the many individual factors and to assess how they contribute to gambling behavior, other things being equal. Of course, other things are never equal among different individuals, but we can resort to multiple regression to make statistical comparisons of behavior among a large number of individuals, each of whom is influenced by a different constellation of factors. This permits us to estimate the contribution of each individual factor to the total observed behavior.

The results of this procedure, summarized in Table 1.5, show the contribution of each of nine important factors to gambling participation. The nine factors are: region of residence, family income, education, national origin, religion, age, distance from one of the 25 largest United States cities, sex, and the individual's perception of whether the type of gambling under discussion is legal where he or she lives.

Each section of the table shows, for a given type of gambling, first the percentages of people in each subgroup who gambled on that game in 1974 and second, what those percentages would be, among a group of people who were alike in all respects except the one in question.

Parimutuel Betting at Horse Tracks. For example, the first set of columns deals with parimutuel betting on horses at the track. The first set of rows deals with the influence of region of residence. Two sets of results are shown. The first (marked "unadjusted") represents participation rates as actually observed in the several regions. The figures show, for example, that betting on the track is reported most frequently (20.1 percent) by people in the Northeast and less than half as frequently

(9.5 percent) by people in the South. But these figures reflect not only regional differences as such, but also any average differences in income, religious belief, education, and other factors that may also differ among regions.

To some extent, then, the low participation observed in the South is really to be associated with the greater prevalence of Bible-oriented religious groups there, with lower incomes, different educational achievement, and so on. The second set of figures (marked "adjusted") represent a statistical estimate of how the participation rates would vary from region to region among groups of people who were identical in income distribution, religious composition, educational achievement, and all of the other nine important factors. The comparison of the two sets of data is quite startling in this instance. Once the influence of other factors has been taken out, regional differences in track betting virtually vanish. If anything, participation tends to be higher in the South than elsewhere, other things being equal. In other words, there is little or no regional variation in proportion of adults who visit the track. What appeared to be variation associated with region in the first instance, proved to be the influence of other factors which predominate in the region.

In similar fashion, the adjusted rates show that a higher percentage of rich than poor people visit the track, although the influence is smaller after adjustment for other factors. Participation by the lowest income groups is much closer to participation of those with the highest incomes, suggesting that income alone cannot account for whether people will go to the track.

Likewise, better educated people attend in larger percentages than people with less education, although there are surprisingly few among those with some college who did not complete a degree.

After adjustment for other factors, there is virtually no variation in track attendance among people of African, Spanish-speaking, or Italian origin. However, compared to all the rest of the population, their participation rates are higher.

There is very striking variation among religious groups. After adjusting for income, education, and nearness to large cities, Jews and Catholics remain the biggest track-goers, and those belonging to Bible-oriented Protestant sects remain the least.

There is some variation by age. Track betting reaches a peak in the 25-44 age group and then declines, the reduction being especially sharp after age 65.

People in the suburban rings, 25-50 miles out from the 25 largest United States cities, go to the track more often than others. Men are slightly more likely to go than women.

Going to the track also varies significantly by whether people perceive tracks to be legal or not. In the case of race tracks, this perception is likely to correspond to the actual legal status. Thus the results show that a larger proportion of people who live in states with horse tracks bet at tracks than do people who live in states without tracks. The latter group must, of course, travel to a state with a track in order to attend.

Casinos. Betting at casinos is five to ten times more prevalent in Western states than elsewhere, in all likelihood due to the Nevada casinos. It is also strikingly more frequent among high than among low-income groups and participation also rises with education. Those of Spanish-speaking derivation have the highest participation rates and blacks the lowest. This would be expected in the unadjusted data because of the relative high density of people of Spanish-ancestry and the low density of blacks found in the West. It is interesting to note, however, that the differences persist even after adjustments for region.

Jews stand out among religious groups with participation rates double those for people of other religions, and the middle-aged are more likely to participate than either very young or very old adults. Like race tracks, attendance at casinos is heaviest among those in the suburban rings near the 25 largest cities, but there is virtually no difference between sexes in participation.

There is a striking difference in participation among people who assert casino gambling is legal where they live than among those who say it is illegal. Since casinos are, in fact, illegal everywhere except Nevada (and no respondents from Nevada appear in this sample) the meaning of this relationship is open to question. It would appear that many people responding "legal" to the question were not addressing themselves to the legal status of casinos where they lived, but rather where they gambled. That is, legal casino gambling was available to them in Nevada.

Bingo. Bingo is ubiquitous, but is engaged in somewhat less in the South than elsewhere. Although participation tends to rise with income,

it declines sharply with education. Blacks are somewhat more and people of Spanish-speaking background considerably less given to playing than the average. Catholics are greater participants than other religious groups -- hardly surprising in view of the traditional role of the game as a church fund-raiser.

Despite the general perception of bingo as a game for the elderly, they participate less than any other age group.

On the other hand, bingo is unique among the forms of gambling examined in that participation rises the farther the group lives from central cities and that women participate more than men.

Lotteries. Participation in lotteries varies strongly with region and is one of the few forms of gambling where the least participation is not found in the South. Lottery participation tends to rise with income, but not sharply, and there is virtually no variation by education. Participation in lotteries is also largely independent of ethnic background, although participation by people of Spanish-speaking origin is only half that of other groups. Likewise, aside from low participation by members of Bible-oriented Protestant sects, religion exerts a minor influence. Like bingo, lottery participation is greatest among the middle-aged, but distance from the city is much less a factor. Somewhat more men buy lottery tickets than women and, of course, people in states with legal lotteries participate three times as frequently as others.

Dog Racing. Betting on dog races varies only slightly by region, income, or education. Among ethnic groups, people of Italian ancestry show participation rates more than double that of other groups. Partici-

pation is highest among Jews and virtually nil among Bible-oriented Protestants. Unlike most other forms of gambling, betting on dogs is most popular among young adults and declines regularly with age. Like most gambling, however, it is most common among dwellers of the suburbs, men participate more than women, and more people participate when they live in states with dog tracks.

Sports Books. Participation in illegal sports betting is most popular in the Northeast and North Central regions, and nearly non-existent in the West, possibly due to the availability of legal gambling facilities in Nevada. Again as we observed in legal gambling, when the influence of ethnic mix, nearness to the largest cities, and income are accounted for, the effect of living in the Northeast on gambling participation is reduced. Participation in sports books rises somewhat with income, but among education groups is highest among those with some college but no degree. There is wide variation for this kind of betting among ethnic groups with virtually none found among blacks, and participation of 4.6 percent among those of Italian ancestry.

Jews participate more in sports books than other religious groups and participation by members of Bible-oriented sects is more common than among other Protestants or among Catholics. Male participation is ten times that of females, who rarely bet on sports illegally.

Horse Books. Participation in illegal horse books is highest in the Northeast and (like illegal sports books and for the same reasons) is almost completely absent in the West. Income has a small influence on participation, and participation declines markedly with education,

almost disappearing among those with college degrees after other factors are taken into account.

Participation in illegal books varies sharply by ethnic background and by religion. After account is taken of other factors, there is virtually no patronage of illegal horse books among Jews, and participation reaches a peak among Bible-oriented Protestants, a complete reversal of the pattern for most forms of gambling.

Except for low participation in the oldest age groups, age has little influence on participation. Distance from metropolitan area is, however, a factor, although the least participation is found in the suburbs, a reversal of other gambling forms. Like most other illegal gambling, it is essentially a male pastime.

Numbers. There is greater regional variation in participation in numbers than in any other type of gambling. In the Northeast, after adjustment, 8 percent of adults play the numbers compared to 1.6 percent in the South and hardly anybody in the West.

There is relatively little variation by income, but a strong tendency for participation to decline with education beyond high school. Virtually no participation was found among those with college degrees after adjustment for other factors. Among ethnic groups highest participation is among those of Spanish-speaking or Italian ancestry. Participation by blacks, although higher than that of all others, was only half that of those of Spanish-speaking or Italian ancestry. Participation varies greatly by religion, from nearly zero among Jews to over 4 percent of Bible-oriented Protestants. Numbers playing declines with age and is reduced very sharply by distance from the metropolitan area.

Although participation rates for men are double, numbers is the only illegal gambling game with substantial female participation.

Sports Cards. Like other illegal gambling, participation in sports cards is lowest in the West. There is some variation by income, but relatively little by education.

Sharp differences are found among ethnic groups with almost no participation among blacks and those of Spanish-speaking ancestry, but 6.1 percent participation among those of Italian ancestry. Sports cards are most popular among Catholics.

Betting on sports cards declines markedly with age, but is little affected by distance from metropolitan area. It is predominantly a male pursuit.

Comparison of Legal and Illegal Gambling. There are interesting differences in demographic influences on legal as compared to illegal participation.

Except for the striking participation of Westerners in gambling casinos, legal gambling participation would vary only slightly among regions if all other factors were equal. Illegal gambling, on the other hand is characteristic of the Northeast and North Central regions, and is virtually absent in the West.

Both legal and illegal gambling tend to rise with income.

Except for lottery and bingo, legal gambling participation tends to rise with education whereas participation in illegal games tends to decline. Betting on horses provides an interesting case. Parimutual betting at the track rises from an adjusted participation rate of 10.8 percent

among people with less than a high school education and 14.7 percent of high school graduates to 19.7 percent among college graduates, whereas participation in illegal horse books drops from 2.5 and 3.7 percent in the low education groups to virtually nothing among college graduates.

Participation varies strongly by ethnic background. Blacks show the highest participation rates for three of the five legal games and the lowest on four of the five illegal games. People of Spanish-speaking ancestry have the highest participation in casino gambling but are very low in bingo and lottery participation. In the area of illegal gambling they are high in playing the numbers. People of Italian ancestry are heavy participants across the board.

There is likewise an interesting shift in the influence of religion between legal and illegal gambling. Except for the predominant participation by Catholics in bingo, Jews have the highest participation rates in all legal gambling. Members of Bible-oriented Protestant sects show very low legal participation. Among illegal games, in contrast, except for sports books, Jewish participation is virtually zero. Moreover, participation by members of Bible-oriented Protestant sects tends to be high, and is highest of all groups in participation in numbers.

Age is an important factor influencing gambling behavior, and appears to affect legal and illegal participants in much the same fashion.

As affected by distance from one of the 25 largest cities, legal gambling, except for bingo, is clearly a suburban phenomenon. Illegal gambling, in contrast, is urban, except for sports books, participation rates decline with distance from the city.

Higher participation rates are observed for males than for females in all types of gambling except at casinos where women are ahead by a small margin. But there is considerably less difference between the sexes in legal than in illegal participation. Except for numbers, illegal gambling is very nearly an exclusively male characteristic.

A note of caution may be necessary here. This section deals with the influence of each of nine demographic or economic variables assuming all of the others are equal. It explains the contribution of each above and beyond what could be expected from the other factors. In the real world social and economic conditions are not distributed equally; therefore, the findings reported in Section 1.5 should be used to understand how gambling participation varies, but should not be used in estimating the impact of legalization on these groups.

1.6 Nevada Residents¹

In view of the wide variation in gambling behavior among communities depending on what activities are legal, it is interesting to examine the gambling behavior of residents of Nevada, the state in which virtually all forms of gambling are legal. This comparison is made in Table 1.6.

In simplest terms, the gambling behavior of Nevada residents is strikingly different from the average for the nation in four ways:

1) There is greater participation by Nevadans in gambling. Three quarters of Nevadans gambled on legal commercial games in 1974 compared with 44 percent of other Americans. 2) The average bettor gambles more. The

1. See Chapter Eleven for a complete analysis of gambling in Nevada.

reported average amount wagered legally for the year was almost \$500 per bettor among Nevada residents compared to \$273 in the United States at large.

3) Gambling is much more regressively related to income in Nevada than in the United States as a whole (see Chapter Three, sections 3.2 and 4). Illegal gambling participation is around a third of what it is in the remainder of the United States.

Nevada operates no horse tracks, but horse players apparently traveled to California or elsewhere to visit a track, since 3.2 percent of the Nevada population went to tracks. This compares with 13.9 percent of the United States, and the average bet per year was much smaller. Absence of stimulation from local tracks also appears to contribute to the relatively low participation rate at both legal and illegal horse-betting establishments. Only six percent of Nevada residents reported betting at a legal horse parlor and another 1.9 percent with illegal horse books, a total that is short of participation in OTB by New Yorkers (13.5 percent). Moreover the average annual bet was considerably smaller.

In total, there appeared to be lower participation in illegal gambling by Nevadans, although it is interesting to note that despite the existence of legal sports-betting facilities, a larger percentage of Nevadans reported patronizing illegal sports books than in the United States at large. Evidence independent of our survey suggests that a considerable part of the illegal gambling in 1974 consisted of bets with illegal horse and sports books to evade the 10 percent federal excise tax on such gambling that was then in effect. The subsequent reduction of the tax to two percent has doubtless further reduced illegal gambling in Nevada. Overall, participation

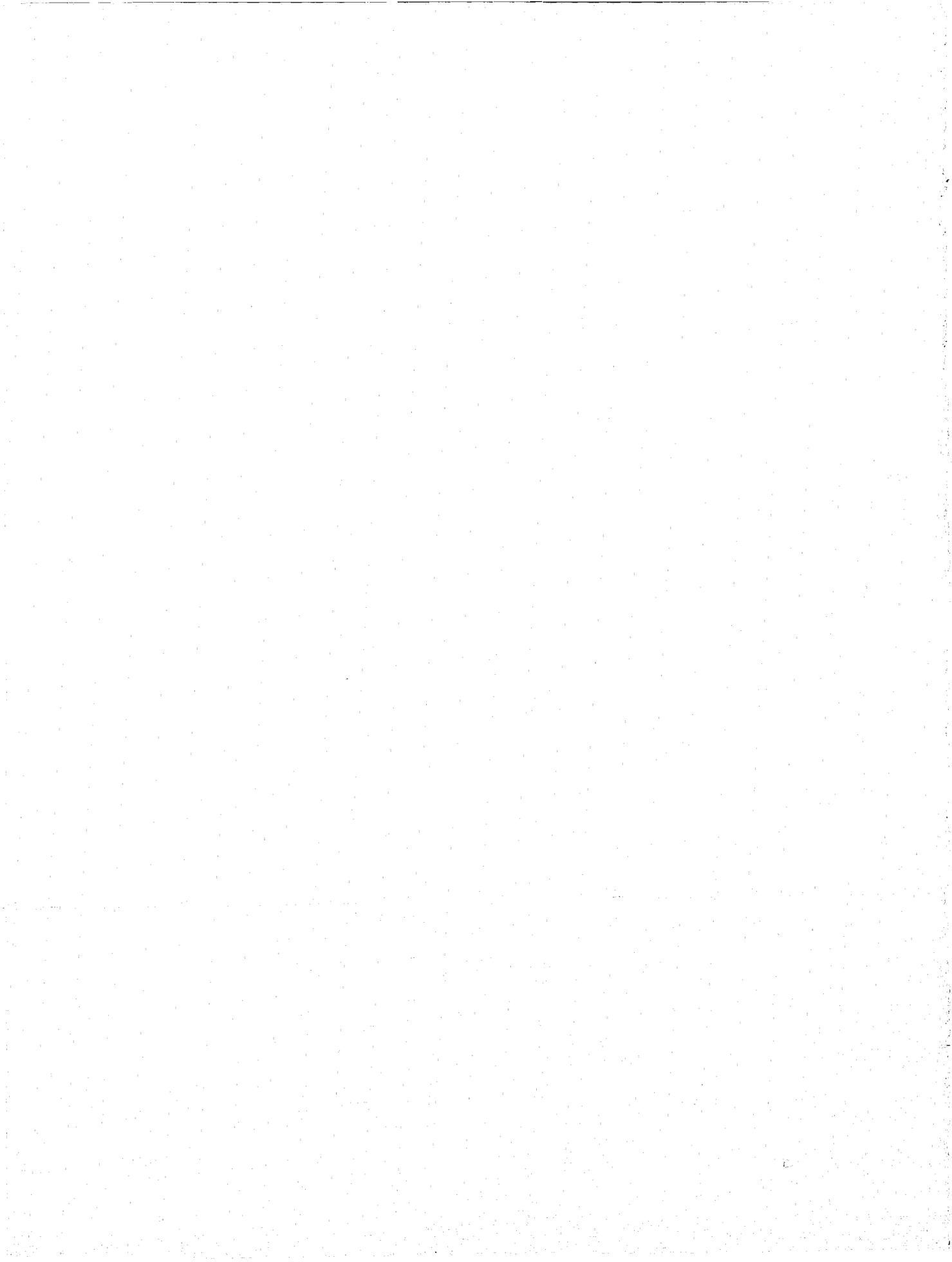


Table 1.6

1974 Gambling Behavior of United States as a Whole
Compared to Nevada Residents*

Game	United States		Nevada	
	Participation (% of Adult Pop.)	Average Annual Wager per Bettor	Participation (% of Adult Pop.)	Average Annual Wager per Bettor
<u>Legal</u>				
Horses at track	13.7	\$ 448	3.2	\$ 103
Off-track betting parlors	13.5 ^a	1118	6.0	179
Slot machines	9.4	448	72.1	377
Keno			54.2	n.a.
Casino games			27.3	846
Bingo	18.7	74	24.1	104
Lottery	47.8 ^b	25	--	--
Sports betting parlors	--	--	8.0	158
Total legal commercial	44.0 ^c	273	76.0 ^d	665 ^d
<u>Illegal</u>				
Sports books	1.9	623	2.9	275
Horse books	2.4	416	1.9	131
Numbers	3.0	273	0.0	--
Sports cards	3.0	44	3.0 ^e	36 ^e
Total illegal	11.2	318	4.3	257

*Note: All estimates are subject to sampling variation. See Table B-4 for standard error.

^aNew York only

^bStates with legal lotteries only

^cIncludes dog races, Jai alai, and other legal forms of gambling not shown above.

^dIncludes sports cards

^eSports cards are legal in Nevada

by Nevadans in legal gambling is 70 percent higher than the United States average and their average bet almost 150 percent larger. Illegal participation is less than one third of the rest of the nation, and the annual bet per illegal bettor is 75 percent of the United States average.

CHAPTER TWO

DYNAMICS OF GAMBLING

2.1 Reasons Given for Gambling on Particular Games

Although 61 percent of the population reports betting, the highest rate of participation for any one game is 38 percent. Knowing however that many people play more than one game it can be presumed they derive different satisfactions from the various games, and indeed our data support that presumption.

As anticipated, 60 percent of those who bet at the track, go to casinos, play bingo, or bet on sports events with friends give as their reason for doing so "to have a good time." Only a small number of lottery and numbers players, however, give this as a reason and even fewer bookie bettors. Surprisingly, there is a great deal of variation among bookie bettors in this regard. Almost half the people who bet on sports with a bookie say they "have a good time," while only a third of those who bet on horses with a bookie and also go to the track give this as a reason. Those who place bets on horses through a bookie without going to the track do not indicate that they do it to have a good time. (Table 2.1-1)

The above data provide insights into the varying appeals that gambling holds for people. For example, in the three games where "having a good time" is not a factor, i.e., numbers, lotteries, and non-track horse bookie bettors, the bettor does not directly participate in or even see

Table 2.1-1

Major Reasons Reported for Gambling on Eight Games*

	Legal Games					Illegal Games			
	Horses at Track %	Casinos %	Sports with Friends %	Bingo %	Lottery %	Sports %	Horses with Bookie Track Bettors %	Non Track Bettors %	Numbers %
<u>Specific Reasons</u>									
Have a good time	86	78	63	62	15	48	33	2	6
Excitement	51	46	46	27	23	38	35	12	19
Challenge	40	41	50	20	33	67	39	60	20
Make Money	33	36	27	19	55	56	66	68	43
Chance to get rich	7	7	2	3	40	8	13	0	0
Pass the time	13	26	18	37	7	10	5	58	5
Something to look forward to	16	13	31	14	40	26	2	25	14
<u>Net Reasons</u>									
Activity interest related	98	92	94	75	82	73	85	77	43
Money Related	37	40	33	23	77	64	68	73	46

*Respondents chose one, two or three reasons from a list of 11 reasons provided.

the actual action. It follows then that gambling participation can be stimulated by providing access to the event itself. The Ohio lottery has incorporated this idea and provides greater participant involvement by means of a televised drawing with much showmanship. It should be relatively easy to see what effect, if any, this innovation has had on the sale of Ohio lottery tickets, although it is not within the scope of the present study to follow through on this.

The three games which share similar patterns of motivation are horses at the track, casinos, and sports betting with friends. For all three "having a good time" is stated as the main reason (63-86 percent), followed by "excitement" and "challenge" at 40 percent to 50 percent each, followed by "to make money" at 27 to 36 percent each. In terms of motivation, these games may be thought of as possible substitutes for each other. Should casino betting become legal in states other than Nevada, one would expect casinos to draw more customers from race track attendees than from lottery, bingo, or illegal game players.

The pattern of reasons given for playing bingo is distinctive. The most frequently mentioned reason is "to have a good time" followed by "to pass the time," with all other reasons given by less than a third of the players.

The motivational pattern of lottery players is similar to that of numbers players, with the largest proportion playing "to make money" and low percentages saying they play "to have a good time," for "excitement," or as a "challenge." Because of this similarity, it might be expected that lotteries provide the best avenue for drawing illegal numbers players

into a legal activity. With further analysis, however, we find that the existence of a legal lottery appears to encourage, rather than discourage betting on numbers (see page 167). This would indicate that when games have similar psychological characteristics, introduction and popularization of one of them may increase interest and participation in the other regardless of their legal status.

The primary reason people give for illegal betting is "to make money." For sports bookie bettors and those horse bookie bettors who do not go to the track, "challenge" is also a major motivation. Presumably this is an expression of beating the system or pitting their skill against the odds.

A final important factor in this discussion is the frequent mention of "to pass the time" by those who bet on horses illegally but not legally. Since the time necessary for actually placing the bet with a bookie is measurable in minutes, not hours or days, it is assumed that the reference here is to the time taken to study the sheets and decide on the bets. A further speculation is that these people live relatively far from a track, since attendance at the track is in actuality the more time-consuming part of betting on horses and therefore would be sought out if it were available. This last point is more important as a conceptual insight than an accounting of who bets since less than 450,000 people fall into this category.

Let us now turn to an analysis of why people who bet on certain games do not bet on others. It is clear that the laws themselves have a measurable restraining effect on illegal gambling. An average of 30 percent of

all bettors state that they do not participate in illegal activities because of legal restrictions. Most say they simply do not wish to disobey the law, but fear of arrest also plays a part. (Table 2.1-2)

It is interesting to note that the same reasons, i.e., "don't wish to disobey the law" and "fear of arrest," frequently given for not participating in illegal activities, were also given for certain games which we designated as legal. We believe this occurred in reference to casinos because of the existence of both legal and illegal casinos. We also believe such reasons were given in response to the question on why they did not bet on sports because we did not limit the question to bets with friends. And finally, a confusion exists in the base of lotteries because "lottery" is a word sometimes used in referring to an illegal form of gambling similar to the numbers game.

Lack of availability is not given as a deterrent in bingo or lottery participation, but is apparently the reason why 10 to 15 percent do not go to horse tracks, casinos, or bet with bookies.

Moral convictions against gambling play only a small role in the deterrence of illegal gambling by those who already gamble through legal channels. Fewer people look upon bingo as immoral than any other form of gambling. Illegal books, especially horse books, are associated with immorality to some extent.

The desire not to risk money is second to disinterest in the game itself as a reason why people say they don't gamble on particular games and in the instance of the track or casinos is essentially as high as disinterest. However, people do not appear to choose whether to gamble legally or illegally on the basis of odds, waste of money, fear of losing money, or other money-related reasons.

Table 2.1-2

Major Reasons Reported for Not Gambling on Eight Games*

	Legal Games						Illegal Games		
	Horses at Track		Casinos	Sports ^a	Bingo	Lottery	Sports	Horses	Numbers
	Total Bettors %	Bookie Bettors %							
<u>Specific Reasons</u>									
Don't know about it	42	31	27	36	10	29	40	35	45
Don't think about it	37	35	22	39	45	37	36	31	34
It's not available	9	15	14	*	5	3	10	14	*
Not interested	36	42	26	33	72	31	28	22	47
Other things to do	41	35	23	42	63	26	30	21	32
Waste of time or effort	6	7	6	11	24	7	8	9	10
Odds against you	21	19	22	8	10	21	19	19	17
Waste of money	19	21	14	18	13	16	17	12	16
Don't want to lose money	18	23	16	14	8	11	15	14	9
Don't disobey the law	9	4	9	14	1	15	21	21	19
Might get arrested	4	2	4	5	1	5	12	14	9
<u>Net Reasons</u>									
Activity interest	77	75	55	79	94	68	66	60	76
Money	70	62	53	45	35	46	50	44	40
Moral	7	7	8	13	3	9	10	14	8
Legal	5	5	12	17	2	16	27	34	24
Social	5	3	4	7	4	2	12	17	7
Availability	9	15	47	6	5	3	0	14	0

^aQuestion asked of all people who did not bet on sports of any kind.

*Respondents chose one, two or three reasons from a list of 18 reasons provided.

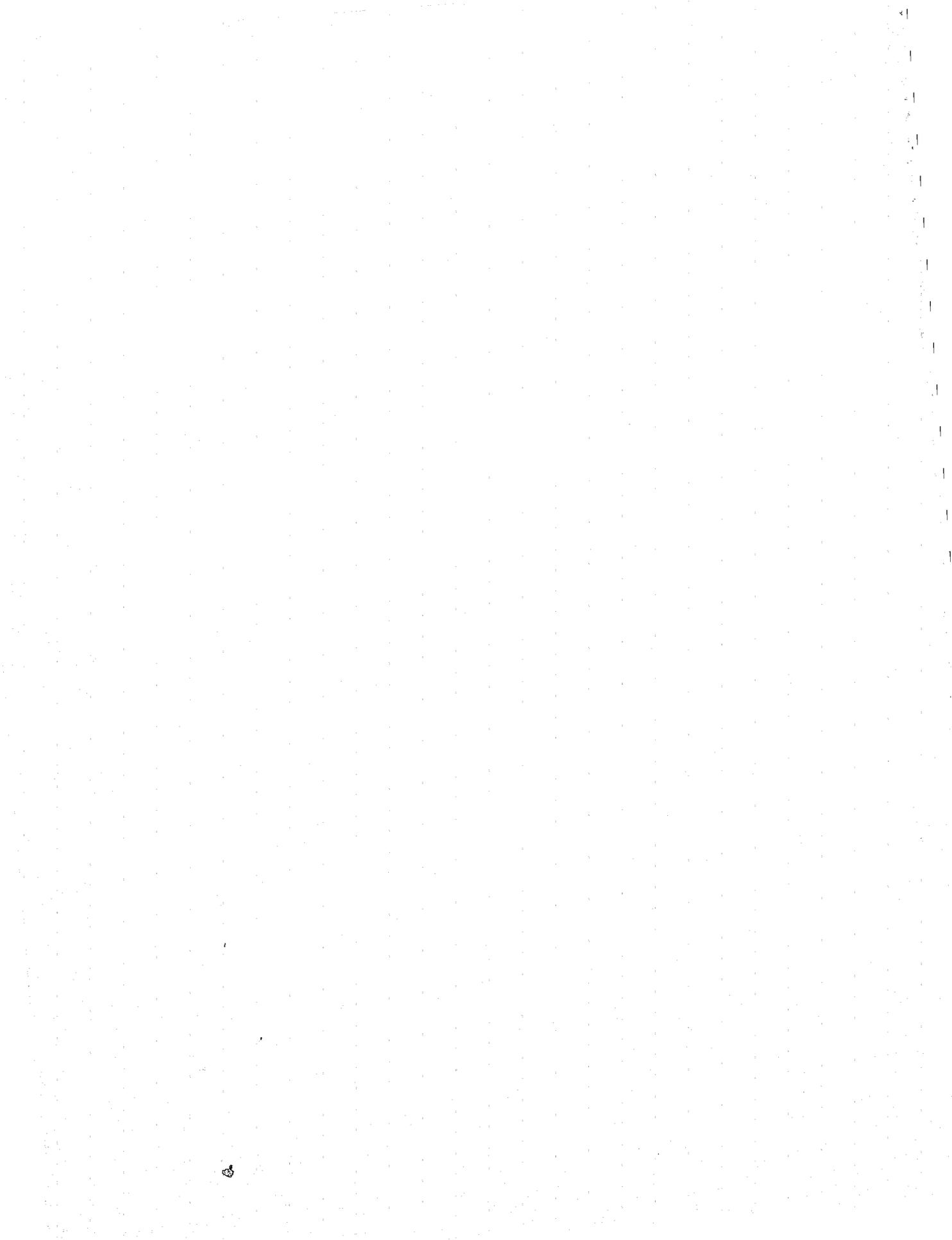


Table 2.1-3

Major Reasons Why Non-Gamblers Report
They Don't Gamble

	Non Gamblers		
	Total Reasons %	First Reasons %	Probed Reasons %
<u>Specific Reasons</u>			
Not interested	44	27	17
It's sinful	40	24	16
Other things to do	38	35	3
Waste of money	37	24	13
It's wrong	34	24	10
Don't know about it	31	27	4
Don't want to lose money	26	16	6
Don't think about it	26	24	2
Don't have the money	25	18	7
Odds against you	23	13	6
Don't disobey the law	21	19	2
Waste of time or effort	16	12	4
It's bad for people	9	*	9
Wasn't raised that way	9	*	0
Don't believe in it	9	1	8
Bad for family	8	1	7
Might get arrested	7	6	1
Not lucky	6	5	1
People get nasty	6	5	1
Causes corruption	5	*	5
It's shoddy	3	2	1
Not available	2	2	*
Too risky	2	0	2
Don't trust the game	1	*	1
<u>Net Reasons</u>			
Activity interest	83	68	15
Money	64	54	10
Moral	48	40	8
Legal	25	22	3
Social	7	6	1
Availability	2	0	2

* less than one half of one percent

Note: Respondents chose one, two or three reasons from a list of 18 reasons.

The reasons non-gamblers give for not gambling at all differ considerably from the reasons gamblers give for not gambling on particular games. Approximately half of the non-gamblers give reasons related to their moral convictions, such as "it's sinful" or "it's wrong." Almost two-thirds give money related reasons such as "it's a waste of money," "don't have the money," or "don't want to lose money."

This suggests that there will always be a group of non-gamblers whose size is determined by the strength of religion in this country, the state of the national economy, and the perception of individual well-being. On the other hand there are many non-gamblers who might well become gamblers if one or more games became legal and well publicized--for example, people who say they don't gamble because "they don't know about it," "don't think about it," "don't want to disobey the law," or "might get arrested." And, depending upon the nature of legalization, others who say their reasons for never gambling are "it's shoddy," "causes corruption," or "don't trust the game" might also begin to gamble. Finally, there are those who say they never gambled because they "weren't raised that way." If gambling became increasingly prevalent, the number of such people would probably diminish.

The strongest indication we have that legalization of gambling can induce the non-gambler to gamble is that as more activities become legal within the states, the total number of non-gamblers decreases. This conclusion is supported by the fact that the total number of non-gamblers is higher in states where bingo, lotteries, and horse tracks are illegal than in those where they are legal.

2.2 Availability of and Exposure to Gambling

The factors which most consistently differentiate gamblers from non-gamblers are the degree of the individual's exposure to gambling and the availability of the activity itself. Although exposure and availability are closely related, they are not the same thing. Exposure is defined as a respondent's perceptions of how many or how few people he knew or presently knows who engage in gambling activities. As such, exposure functions as a familiarity-acceptability concept. The availability measures in the study are of two types. One is perceived availability: does the respondent believe a given activity is available where he lives? The other is actual legal availability in the state. Table 2.2-1 is a summary of five different measures. All five show a strong consistent positive relationship between exposure, availability, and gambling participation.

The first exposure-availability measure is contact during childhood with people who gamble. The proportion of bettors exposed to a relatively large number of gamblers when youngsters is twice that of non-bettors. The proportion of illegal bettors exposed to gamblers is even greater: four times that of non-bettors. Whether the measure is gambling among friends, legal commercial gambling, or illegal gambling, the result is unchanged: current illegal gamblers had higher levels of childhood exposure than legal bettors and much higher levels than non-bettors.

The next exposure-availability measure in this study is whether, as adults, people have lived somewhere else where gambling activities were available. The same pattern noted above emerges. Current betting behavior is associated with prior exposure to available games. Compared to

Table 2.2-1

Indices of Exposure and Availability by Current Betting Behavior

	Non Bettors %	Bettors %	Illegal Bettors %
<u>Exposure in Childhood to at least quite a lot of people who engaged in:^a</u>			
Any kind of gambling	7	16	24
Gambling among friends	16	24	38
Legal commercial gambling	6	13	19
Illegal gambling	4	10	21
<u>Availability in places previously lived since 18 years of age^b</u>			
Any kind of gambling	11	25	31
Legal commercial gambling	13	28	33
Illegal gambling	9	23	30
<u>Perceived local availability^c</u>			
Any kind of gambling	46	67	73
Legal commercial gambling	42	66	72
Illegal gambling	51	68	75
<u>Legal in state^d</u>			
Legal commercial	41	51	52
<u>Exposure today to at least quite a lot of people who engage in:^a</u>			
Any kind of gambling	11	29	40
Gambling among friends	12	37	48
Legal commercial gambling	13	33	40
Illegal gambling	5	15	32

^aSee pages 4 and 5 of Appendix D: Questionnaire for data used in development of indices. Indices are an average of the top two points of the scale (most people and quite a lot of people) over 13 games, 3 games, 6 games and 4 games respectively.

^bSee page 7 of Appendix D: Questionnaire. Indices are an average over 14 years, 7 games and 6 games respectively.

^cSee page 11 (E1a); page 12 (E5); page 37 (G1); page 41 (H2); page 57 (K1); page 65 (L-1); and page 80 (M-17); for individual items used to compile this index.

^dPublished sources of legal statutes.

Table 2.2-2

Comparison of Perceived and Actual Availability
Across Three Legal Commercial Games

	Non Bettors %	Bettors %	Illegal Bettors %
Perceived local availability	42	66	72
Actual state availability	48	61	62

non-bettors, more than twice as many bettors and almost three times as many illegal bettors had lived somewhere else where betting was available.

We have two measures of availability and one of exposure still closer to the respondent's current situation. All three measures illustrate the same strong relationships. Compared to non-gamblers, gamblers and illegal gamblers have higher perceived availability scores and higher current exposure scores.

Table 2.2-2 presents perceived local availability and actual state availability measures for bingo, lotteries, and horse tracks combined. Perceived local availability is a combined measure of whether the person has knowledge of a race track in his general area, whether it is possible to find a commercial bingo game where he lives, and whether it is possible to buy state lottery tickets around his city or area. Actual state availability indicates whether bingo, horse tracks, or state lotteries are operating legally in his state. Non-bettors report less local availability than would be expected from state availability measures and bettors report more local availability than is expected. There are three possible interpretations of this data. The first is that more non-bettors live in areas within states where, though legal, games are not in operation. The second explanation is that bettors have a broader perspective of what constitutes "the general area" they live in. For example, they might consider a track that is 50 miles away to be in their general area while a non-bettor living in the same place might not. The third and most likely explanation is that non-bettors are simply less aware of what is and what and what is not available. This third explanation is consistent with the



CONTINUED

1 OF 7

data about current exposure to other people who gamble quite a lot.

The fifth measure presented in Table 2.2-1 is current exposure to a substantial number of people who engage in gambling. Only 11 percent of those who did not bet in 1974 said they knew quite a lot of people who did. This compares to 29 percent for bettors and 40 percent for illegal bettors. The apparent isolation of non-gamblers from gamblers is startling when we place it in the perspective that 61 percent of the population bets. Nevertheless 89 percent of non-bettors know only a few people who gamble, and neither the opportunity to learn about gambling nor the acceptability framework are actively present in their lives.

A multivariate analysis of the exposure and availability data indicates that exposure in childhood accounts for 14 percent of the variance in gambling participation. This increases to 16 percent when we take into account whether they report gambling was available in places where they had previously lived, to 18 percent when gambling laws in their state are factored in, and to 27 percent when current exposure is added.

An examination of Table 2.2-3 shows these variables alone are excellent predictors of whether a person will gamble or not as shown by the high percentage of correct classifications of gamblers versus non-gamblers but are insufficient predictors of whether a gambler will engage in illegal activities which shows up as a downward bias in the Multiple R. It is important to note that when information is limited to two factors, availability and exposure, there is an increased likelihood of arriving at deceptive figures which predict greater numbers of probable bettors than actually exist. This is due to the fact that not only have bettors had high levels of exposure and

availability, but a fair number of non-bettors as well.¹

Another multivariate analysis yielded the difference that various types of exposure make as to type of gambling participation. (Table 2.2-4) As childhood exposure to gambling among friends increases so does the probability that a person will gamble in adulthood. As childhood exposure to legal commercial gambling increases, the probability of adult legal commercial gambling increases while illegal gambling probability decreases. As childhood exposure to illegal gambling increases, the probability of legal gambling greatly decreases while the probability of illegal gambling greatly increases. The probability of non-gambling is not affected.

As availability of legal gambling facilities in prior places of adult residence increases, the probability of current legal commercial gambling increases while the probability of non-gambling decreases, and illegal gambling remains unaffected. As availability of illegal facilities in prior places of residence increases, the probability of non-gambling decreases while the probability of legal gambling increases and illegal gambling rises even more.

The legal facilities function is not linear, but generally speaking as the number of legal facilities increases the probability of non-gambling decreases, and the probabilities of both legal and illegal gambling increase.²

As current exposure to gambling among friends increases, gambling of all types increases. As exposure to legal commercial gambling increases,

1. Additional multivariate analyses of this data combined with other information is found on page 163.

2. See page 160 for a full discussion of the relationship of legal facilities and gambling activities.

Table 2.2-3

Regression Analyses and Tabulation of Correct Classification
from Exposure and Availability Measures to Gambling Participation Modes

	Non Bettors %	Bettors %	Illegal Bettors %	
<u>Childhood exposure</u>				
R ²				.14
Correct classification Non-gambler vs commercial vs illegal	56	78	4	
Correct classification Non-gambler vs gambler	56			
		┌──────────┐ 74		
<u>Availability somewhere else</u>				
R ²				.16
Correct classification Non-gambler vs commercial vs illegal	55	81	1	
Correct classification Non-gambler vs gambler	55			
		┌──────────┐ 74		
<u>Legal in states</u>				
R ²				.18
Correct classification Non-gambler vs commercial vs illegal	63	75	6	
Correct classification Non-gambler vs gambler	63			
		┌──────────┐ 77		
<u>Current Exposure</u>				
R ²				.27
Correct classification Non-gambler vs commercial vs illegal	69	80	17	
Correct classification Non-gambler vs gambler	69			
		┌──────────┐ 81		

Table 2.2-4

Coefficients from Multivariate Analyses of Specific Exposure and Availability Measures by Type of Gambling Participation

<u>Childhood Exposure--Friends</u>			
	Non		Illegal
	<u>Bettors</u>	<u>Bettors</u>	<u>Bettors</u>
None	17.5	-11.3	- 6.2
A little	- 1.4	1.3	0.1
Quite a lot	- 7.3	4.0	3.3
A great deal	-17.6	11.5	6.0

<u>Childhood Exposure--Legal</u>			
	Non		Illegal
	<u>Bettors</u>	<u>Bettors</u>	<u>Bettors</u>
None	14.0	-16.3	2.3
A little	2.1	- 3.0	0.9
Quite a lot	-12.8	14.7	- 1.9
A great deal	- 6.4	8.7	- 2.3

<u>Childhood Exposure--Illegal</u>			
	Non		Illegal
	<u>Bettors</u>	<u>Bettors</u>	<u>Bettors</u>
None	1.7	3.5	- 5.2
A little	- 2.6	1.1	1.5
Quite a lot	- 4.6	.0.3	4.3
A great deal	- 0.3	-22.2	22.5

<u>Prior Availability--Legal</u>			
	Non		Illegal
	<u>Bettors</u>	<u>Bettors</u>	<u>Bettors</u>
None	3.5	- 4.5	0.9
Some	- 6.0	9.1	- 3.0
A lot	- 6.5	7.0	- 0.5

<u>Prior Availability--Illegal</u>			
	Non		Illegal
	<u>Bettors</u>	<u>Bettors</u>	<u>Bettors</u>
None	2.5	- 0.9	- 1.6
Some	- 1.0	- 0.1	1.1
A lot	-10.7	4.2	6.5

<u>Legal Facilities Available Now</u>			
	Non		Illegal
	<u>Bettors</u>	<u>Bettors</u>	<u>Bettors</u>
None	12.8	-13.5	0.8
Bingo or Bingo + Lottery	0.8	0.4	- 1.2
Horses or Horses + Bingo	6.4	- 3.1	- 3.3
Horses and Lottery	- 1.3	- 2.2	3.5
Horses and Bingo and Lottery	-10.5	10.2	0.3
Horses + Bingo + Lottery + OTB or Pickit	-14.4	6.9	7.5

<u>Current Exposure--Friends</u>			
	Non		Illegal
	<u>Bettors</u>	<u>Bettors</u>	<u>Bettors</u>
None	9.6	- 7.8	- 1.8
A little	5.3	- 3.1	- 2.3
Quite a lot	- 8.2	7.9	0.3
A great deal	- 7.6	3.0	4.6

<u>Current Exposure--Legal</u>			
	Non		Illegal
	<u>Bettors</u>	<u>Bettors</u>	<u>Bettors</u>
None	24.3	-23.4	- 0.9
A little	14.7	-14.1	- 0.6
Quite a lot	- 4.3	3.1	1.2
A great deal	-11.7	12.0	- 0.3

<u>Current Exposure--Illegal</u>			
	Non		Illegal
	<u>Bettors</u>	<u>Bettors</u>	<u>Bettors</u>
None	1.0	3.9	- 5.0
A little	- 5.9	10.1	- 4.3
Quite a lot	1.7	- 1.7	- 0
A great deal	- 0.2	-16.7	16.9

the probability of gambling increases for legal games only. And finally as exposure to illegal gambling increases, the probability of illegal gambling increases greatly, and the probability of legal commercial gambling decreases while non-gamblers are not affected.

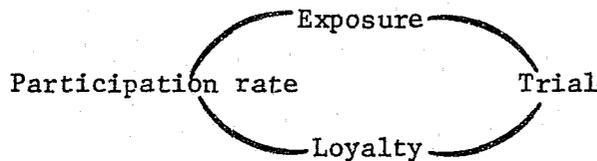
We have previously discussed the sharp rise in gambling participation rates in the lifetime of the population in connection with age and participation. We see further evidence of the increase in gambling activity from the time our sample were youngsters til today. In each specific gambling activity, the exposure level is higher today than it was when the sample were youngsters. Table 2.2-5 provides greater detail of this finding for two of the gambling activities.

Table 2.2-5

Distribution of Exposure Responses for
Two Gambling Activities

	When Youngster %	Now %
<hr/>		
Horses at track		
Most people do/did it	3	7
Quite a lot of people do/did it	10	19
A few people do/did it	23	35
Practically no one does/did it	64	39
Go to casinos		
Most people do/did it	2	4
Quite a lot of people do/did it	5	13
A few people do/did it	16	26
Practically no one does/did it	77	57

Let us consider the implications. Gambling participation is related to this perception that many others gamble. Gambling participation rates have risen dramatically in the last 25 years or so. More people are gambling today. Therefore, more people will begin to gamble. In addition, early exposure is likely to change the attitudes toward gambling even more so and further stimulate gambling behavior.



2.3 Situational Correlates of Gambling Activity

As they grow up, people are differentially exposed to environmental situations which may affect whether they will gamble or not. We investigated many of these and found that growing up in cities of 5,000 or more was associated with gambling while growing up in cities of one million or more was associated with illegal gambling. Over 50 percent of the non-gamblers grew up in cities of less than 5,000 inhabitants or in rural areas. We further found that over half of the non-gamblers were taught that gambling is sinful when they were children. In contrast, past experience in the armed services is related to gambling. Sixty-five percent more bettors and over 200 percent more illegal bettors than non-bettors were in the service. (Table 2.3-1)

Whatever the childhood and early adulthood experiences may have been, current situational variables are also correlated with gambling activity.

Table 2.3-1

Situational Correlates of Gambling Activity
(Childhood and Early Adulthood)

	Non Bettors %	Bettors %	Illegal Bettors %
<u>City Size Grew Up In</u>			
1 million or more	6	10	16
100,000--1 million	14	20	21
Suburb of large city	3	9	11
5,000--20,000	23	32	27
Less than 5,000	16	12	13
Rural	36	17	11
No answer	2	0	1
<u>Religious Teaching</u>			
Gambling is sinful	55	35	42
Gambling is not desirable	18	33	29
No teaching, don't know	18	29	27
No religion	9	3	2
Went into service	17	28	37
Stationed overseas	11	17	21

Non-bettors are more likely than bettors to have a stated religious preference while illegal bettors are least likely. Likewise non-bettors attend religious services more than bettors in general, and illegal bettors attend least.

The occupation one has and the industry one works in are also related to gambling activity. Presumably these occupational factors are related both to income, education, and exposure to others who are gambling. We have no evidence on the extent to which gambling actually occurs on the premises of work or indeed whether it does at all except for the eleven percent who say they bet in a check pool at work. Nevertheless, we do know that less skilled workers (laborers and service workers) and farmers are over-represented in the non-betting population and under-represented among bettors; that professional and technical people are found in greater number among bettors than among non-bettors and that managers, craftsmen, foremen, and operatives have progressively higher representation among both bettors and illegal bettors.

Over half of the illegal bettors now work in the transportation, construction, or services industries or in the wholesale or retail trades. Forty-eight percent of the bettor population comes from these industries while only 34 percent of the non-bettor segment of the population comes from there. (Table 2.3-2)

There are four forms in which economic factors are related to gambling: income, access to cash through number of pay periods or self employment, spending style, and future security.

Table 2.3-2

Situational Correlates of Gambling Activity
(Current)

	Non Bettors %	Bettors %	Illegal Bettors %
Have a religious preference	75	70	62
Attend religious services at least once a week	47	27	26
Attend religious services less than once a week	30	50	55
Do not attend	23	23	19
<u>Work is/was</u>			
Professional, technical	10	18	14
Management/self employed	5	12	15
Clerical or sales	13	18	18
Craftsman, foremen	9	12	18
Operatives	9	11	13
Laborer or service worker	16	8	10
Farmer	4	2	2
Widows, housewives	30	18	8
Don't know, no answer	4	1	2
<u>Industry is/was</u>			
Agriculture	7	3	3
Manufacturing durables	6	11	11
Manufacturing non-durables	9	7	9
Construction, transportation	6	12	20
Wholesale or retail trade	10	12	14
Finance, insurance, real estate	3	4	6
Services	19	24	21
Armed forces, government	4	5	5
Inappropriate	32	19	9
Not ascertained	4	3	2

Almost 60 percent of non-bettors have incomes under \$10,000 a year from their main job, the bulk of bettors have incomes over \$10,000, and the majority of illegal bettors have even higher incomes from their main job.

Bettors appear to have more frequent access to cash than non-bettors and illegal bettors have even greater cash access in terms of both number of pay periods and cash on hand.

It was hypothesized that gambling was a form of risk-taking behavior. The first sub-hypothesis was that individuals who gambled should exhibit other risk-taking behavior. The second-sub hypothesis was that individuals who gambled would be freer to take risks by virtue of having an established future security no matter what happened on their risk-taking ventures. We found bettors are more likely to engage in speculative behavior such as borrowing money or owning stocks and bonds which lends support to the first hypothesis. We also found that gamblers were more likely to have their future secured by social security and pension plans than non-gamblers and hold 60 percent more assets, thus providing support for the second hypothesis.

Home rental versus ownership does not differentiate gamblers from non-gamblers, but does differentiate people who gamble illegally from all others. Illegal gamblers are more likely to rent. We believe this relates to the urban factor in illegal gambling on one hand and the mobility factor, discussed elsewhere, on the other hand.

It is often said that gambling activity is related to how money is spent in general--that non-gamblers tend to be tight with money in all aspects of life and gamblers tend to place less value on fixed budgets.

Table 2.3-3

Financial Correlates of Gambling Activity

	Non Bettors	Bettors	Illegal Bettors
<u>Income</u>			
(Income from main job)	%	%	%
Under \$5,000	33	17	10
\$5,000-\$10,000	27	30	24
\$10,000-\$15,000	20	26	32
\$15,000+	17	23	31
No answer	3	4	3
<u>Access to Cash</u>			
Self Employed	12%	12%	19%
Average number of pay days in month	2.71	2.79	2.86
Have two months pay in cash	51%	68%	74%
<u>Future Security</u>			
	%	%	%
Owns home	70	68	59
Rents home	25	28	39
Neither	5	3	2
Owns land	27	28	28
Owns stock	18	36	36
Owns bonds	23	37	40
Average total assets	\$40,143	\$61,427	\$58,862
Covered by Social Security	85%	89%	86%
Has pension	48%	67%	65%
Borrowed money (not mortgage)	28%	44%	50%
<u>Spending Style</u>			
Average spent on groceries per week	\$40	\$48	\$50
Average spent on recreation per week	\$10	\$20	\$27
Average number of vacation days in 1974	15	19	20
Went on vacation in 1974	64%	86%	89%
Average spent on vacations	\$431	\$736	\$698

All this seems to be supported. In fact, gamblers more than non-gamblers, and illegal gamblers more than gamblers in general spend more on groceries each week, more on recreation each week, more on vacations, and even take more vacations each of longer periods. (Table 2.3-3)

Many of these economic correlates of gambling might be said to be merely correlates of the relationship of income to gambling, for example, higher incomes give you more money for investing, more opportunity to borrow, and more extra cash for non-essential items. We would argue that the relationship is not that simple. It may well be that it is these dynamics of how income is spent which create the relationship of gambling to income and in any case explains it.

2.4 Compulsive Gambling and Other Socially Undesirable Correlates of Gambling

One of the objectives of this study was to determine whether any negative social consequences might be related to gambling. It soon became apparent that a number of such consequences existed which we divided into two categories--undesirable and pathological. Compulsive gambling or gambling pathology will be dealt with later in this chapter.

Before proceeding, let us clarify the concept of "level of gambling activity" as it is employed here. The lowest level of gambling activity is, of course, not betting at all. The next level consists of gambling, but only with friends and in legal commercial games. The third level of involvement includes gambling on illegal activities, while the highest level involves heavy betting on illegal activities.

Table 2.4-1

Family Problems and Gambling Behavior

	Total Sample	Non Bettors	Bettors	Illegal Bettors	Heavy Illegal Bettors
Divorced/Separated	6.7%	4.9%	7.8%	9.8%	16.4%
Disagreement on money matters (5 point scale)	2.41	2.38	2.43	2.51	2.47
Spouse doesn't understand me	9.1%	8.3%	9.6%	14.7%	14.4%
Children have more problems than other children	4.0%	2.0%	5.0%	7.0%	11.0%

Table 2.4-2

Job Problems and Gambling Behavior

	Total Sample	Non Bettors	Bettors	Illegal Bettors	Heavy Illegal Bettors
Job Dissatisfaction	17%	14%	17%	17%	26%
Days of work missed in 1974	7	7	7	9	13
Days late to work in 1974	3.73	1.73	4.50	5.59	11.17
Number of jobs in last 3 years	2.73	2.76	2.71	3.60	3.20
Wages have been garnished	1.0	0.3%	1.2%	2.2%	5.5%

There is a strong relationship between unsatisfactory marital situations and level of gambling activity. As gambling increases, we observe an increase in divorce, disagreements about money matters with one's spouse, a lack of understanding between couples, and more problems among children of the gamblers. It is impossible to determine whether gambling is the cause or a result of these factors. Without making any judgment as to which is cause and which is effect, it should be pointed out that marital dissatisfaction and divorce are known to be related to forms of deviant behavior other than problem gambling and that deviant behaviors are known to cause marital problems. The most likely relationship is cyclical. Both behaviors feed upon each other creating an even worse situation. (Table 2.4-1)

Level of gambling activity is also related to problems on the job. Some of the job-related correlates of gambling are detrimental to the individual, but most of these problems relate primarily to the employer and may be projected to the national economy.

A high degree of job dissatisfaction and days of work missed seem to be related only to illegal gambling, but other job-related problems show a continuous rise with gambling activity. (Table 2.4-2) These represent real economic costs associated with gambling. More days of work missed and hours missed due to lateness translate directly into lost dollars through lost production. Higher turnover means additional training costs as well as reduced production. All these adversely affect the profit of the individual employer as well as the national economy.

Job dissatisfaction is not as directly calculable in dollars and cents but presumably is related to lower productivity as well. Garnishment is a cost to the employer in bookkeeping adjustments. In terms of the individual, job dissatisfaction, frequent job changes, and garnishment of wages are no small matter, whether measured in dollars or personal happiness. As for which is cause and which is effect, we would argue that gambling can lead to tardiness and absenteeism but is unlikely to be caused by these factors. However, an alternative hypothesis that youth or other variables which are correlated with gambling can create the variation in absenteeism and tardiness found among gamblers is also viable. Job dissatisfaction, lost jobs and wage garnishment might lead to gambling as a means of providing satisfaction, making money, or making garnishment free money, or might be the result of the gambling activity itself.

There is a strong relationship between gambling behavior and past and anticipated mobility. We hypothesize that these mobility items are indicators of relative instability of individuals which causes both the risk taking behavior (gambling) and the movement from one place to another with the unrealistic hope of transforming their lives into something different and better. This presumably is an escapist philosophy. That is, "If I just lived in another 'state' or 'city,' I would meet the right people and things would be different" rather than, "If I used my own initiative, I would make things better." (Table 2.4-3)

Still another relationship between gambling and undesirable behavior involves the level of alcohol consumption. People who bet say they consume alcohol on four times as many days as people who do not bet at all.

Table 2.4-3
Mobility and Gambling Behavior

	Total Sample	Non Bettors	Bettors	Illegal Bettors	Heavy Illegal Bettors
Average times moved in last three years	.65	.60	.68	.93	.96
Average length of current residence	9 yrs.	11 yrs.	8 yrs.	6 yrs.	5 yrs.
Would move out of city if could	35%	31%	37%	44%	49%
Would move out of state if could	27%	21%	31%	38%	50%

As the dollar volume of betting increases so does alcohol consumption. Heavy illegal bettors admit to drinking alcoholic beverages on over 100 days a year. This is significantly greater consumption than any other group.

(Table 2.4-4)

It is impossible to state whether gambling activities increase alcohol consumption or vice versa, but the relationship is strong.

Alcohol consumption varies with the type of gambling activity as well as the amount bet.

Bingo and lottery players say they consume alcohol on fewer occasions than track and casino players who in turn say they consume alcohol less frequently than numbers or dog players. Sports players would appear to be more frequent drinkers than players of any other specific type of game, with bookie bettors showing the greatest frequency of alcohol consumption. (Table 2.4-5) Of course, alcohol consumption is related to other factors as well. For example, people who bet on sports tend to have higher incomes and alcohol consumption is known to be related to income.

Compulsive Gambling. Compulsive gambling has been characterized by Custer (in press¹) as "a preoccupation and urge to gamble with frequent gambling activity The gambling preoccupation, urge and activity characteristically are progressive and with significant increases during periods of stress. Problems which arise as a result of gambling lead to an intensification of gambling behavior. As an adult there is invariably a failure to sustain lasting close relationships with family, acquaintances

1. Custer, R. L. Description of Compulsive Gambling. Manuscript prepared for the American Psychiatric Association Task Force on Nomenclature (in press).

Table 2.4-4

Alcohol Consumption and Gambling Behavior

Mean Days of Alcohol Consumption other than at meals	
Total population	44
Non-bettors	<u>17</u>
Bettors	<u>61</u>
Light (\$1-50 a year)	56
Average (\$51-200 a year)	65
Heavy (over \$200 a year)	83
Illegalbettors	<u>80</u>
Light (\$1-50 a year)	85
Heavy (over \$50 a year)	104

Table 2.4-5

Alcohol Consumption by Type of Game Bet

Mean Days of Alcohol Consumption other than at meals	
Bingo	48
Lotteries	62
Horses at track	71
Casinos	73
Numbers	76
Dogs	76
Sports	83
College sports	95
Illegal sports bets	109
Illegal horse bets	110

or sexual partners; but usually an ability to sustain good job performance over several years except in the later stages." The detrimental effects upon the individual resulting from prolonged compulsive gambling are a failure to remain financially solvent and support oneself and family, with complications including alienation, suicide attempts, non-violent crimes such as embezzlement and forgery, and resultant imprisonment. Deleterious effects on society include loss of funds by lending sources, loss of time from the job and associated costs, and the cost of imprisonment and providing support for families whose funds have been depleted.

On the basis of a separate sub-study of known compulsive gamblers, described in detail in Chapter Twelve and Appendix B, a scale of 18 items was developed in order to estimate the incidence of compulsive gambling in the United States. The items employed were based on risk-taking behavior, self-esteem, and other concepts in the existing literature which seemed to bear a relationship to compulsive gambling. The discriminant weights developed in the separate study of compulsive gamblers were applied to the scores of the respondents in the national study, and the interviews of those who were classified as "compulsive gamblers" with a high degree of probability were further screened to develop estimates of the incidence of compulsive gambling. On the basis of the statistical and clinical screening, slightly less than one percent of the national sample--1.1 percent of the men and 0.5 percent of the women--were classified as probable compulsive gamblers. An additional 2.3 percent of the sample--2.7 percent of the men and one percent of the women--were classified as potential compulsive gamblers.

Although the derivation of these figures was primarily clinical rather than statistical, they suggest that there are 1.1 million compulsive gamblers and an additional 3.3 million potential compulsive gamblers in the United States today.

Those classified as probable and potential compulsive gamblers tended to marry more often, to spend more on recreation and vacations, and to have more family problems. More significantly, a greater percentage of the family income was ventured on betting activities by those classified as potential or probable compulsive gamblers, and they sustained gambling losses from eight to 15 times as great as the general population. These and additional results are detailed in Chapter Twelve.

We have found repeatedly that the incidence of gambling on different types of games is associated with exposure to others who gamble. Exposure to others who gamble is almost certainly a function of the availability of games. In Nevada where there is widespread availability of legal gambling facilities, the incidence of compulsive gambling, admittedly based on a small number of respondents, was estimated to be about twice as high compared to the national estimates. Nationally the estimated incidence is less than one percent compulsive gamblers and an additional 2.3 percent potential compulsive gamblers. In Nevada the estimated incidence of actualized compulsive gamblers (2.6 percent) exceeds the estimate of potential compulsive gamblers (2.3 percent), which suggests that easy access to gambling facilities may result in the actualization of those who are predisposed to compulsive gambling. Our best estimate based on the data at hand is that widespread legalization of gambling may lead to a

significant increase in the incidence of compulsive gambling. Operating on the assumption that widespread legalization of gambling in the nation will result in an increase in the incidence of compulsive gambling from the current national estimate of 0.77 percent to the current Nevada estimate of 2.62 percent, the magnitude of the increase would be from the current estimated 1.1 million compulsive gamblers to a projected 3.8 million.¹

2.5 Excitement and Other Needs

Excitement is the term most often associated with gambling. Not all people need excitement to the same degree. Similarly, all gambling games do not provide the same amount of excitement and people rate the excitement of each of the gambling games differently. Considering everyone--bettors and non-bettors--the horse tracks are perceived as the most exciting, followed closely by card games with friends, surprisingly ahead of casinos and slot machines which came next. (Table 2.5-1)

But nothing can be more surprising than to find all four major illegal gambling activities ranked at the very bottom of the list with lower excitement ratings than bingo and lotteries. It seems natural to attribute this finding to possible misconceptions on the part of the non-bettors of each game, but when gambling activities are ranked by the excitement ratings provided by the bettors of the games they themselves actually play, we find a similar though not totally parallel configuration. Still trailing are betting on sports with a bookie and playing the numbers. Just one pace off the last four positions is betting on horses with a bookie. Among illegal games, only betting on sports is relatively more exciting to those who play it. Among legal games, bingo is relatively more exciting to those

¹This estimate must be regarded with caution in view of the fact that the statistical-clinical basis of classification renders it impossible to provide confidence limits for the projections. Further, the projections are based on a small number of people from Nevada who were classified as compulsive gamblers.

Table 2.5-1
Excitement Rankings for 13 Gambling Activities

	<u>Total Sample</u>		<u>Bettors of Specific Games</u>	
	Rating	Ranking	Ranking	Rating
Horse tracks	3.98	1	1	6.59
Cards with friends	3.74	2	2	NA
Gambling casinos	3.41	3	3	5.80
Slot machines	3.39	4	6	5.26
Bingo	3.19	5	7	5.08
Sports with friends	3.11	6	8	5.01
Lottery	2.80	7	10	4.11
Dog tracks	2.77	8	5	5.50
Dice	2.54	9	11	NA
Horses--bookie	2.06	10	9	4.35
Sports cards	1.96	11	4	5.44
Sports--bookie	1.90	12	12	3.87
Numbers	1.74	13	13	3.52

Scale: 1 (Not at all exciting) to 8 (Very exciting).

who play it. The top three positions remain the same (horsetracks, cards, and casinos). Obviously illegal gambling does not owe its success to the excitement it generates.

As one becomes more involved in betting, perceptions of excitement for all gambling games are heightened (Table 2.5-2). Comparing the bettors', non-bettors', and the general population's need for excitement, we find respondents in general claimed they had more excitement in their lives than they needed and this was most true for non-bettors, and least true for those who bet illegally. The more intense the gambling participation, the higher the need for excitement and the higher the reported level of excitement they now have. Since the differential rate is less, gamblers indicated less fulfillment of this need. (Tables 2.5-3)

Excitement is very low on the list of needs we questioned people about. The top five things people feel they need to make them happy are: control over their own life, close comfortable relationships with people, interesting things to do, interesting things to look forward to, and well-mannered associates, in that order.

On each of these the need is greater among bettors than non-bettors, but the need fulfillment, i.e., the difference between what they believe they need to make them happy and what they think they have now, differs between bettors and non-bettors. Of the top five needs, bettors indicate less fulfillment in control over their life, interesting things to do, and things to look forward to; while non-bettors indicate less fulfillment in close comfortable relationships with people and well-mannered associates.

Table 2.5-2

Excitement Ratings for 13 Gambling Activities

	Total Sample	Non Bettors	Bettors	Illegal Bettors	Bettors of Specific Games
<u>Excitement level of</u>					
Horses at track	3.98	2.59	4.83	5.60	6.59
Cards with friends	3.74	2.44	4.53	5.30	NA
Gambling casinos	3.41	2.06	4.24	5.02	5.80
Slot machines	3.39	2.27	4.08	4.35	5.26
Bingo	3.19	2.55	3.58	3.65	5.08
Sports with friends	3.11	2.07	3.75	4.66	5.01
Lottery	2.80	2.05	3.26	3.52	4.11
Dog tracks	2.77	2.06	3.21	3.50	5.50
Dice	2.54	1.90	2.94	3.89	NA
Horses off-track	2.06	1.63	2.32	3.33	4.35
Sports cards	1.96	1.59	2.19	3.36	5.44
Sports with bookie	1.74	1.47	1.90	2.88	3.87
Numbers	1.63	1.47	1.74	2.18	3.52

Scale: 1 (Not at all exciting) to 8 (Very exciting).

Table 2.5-3

Need for Excitement

	Total Sample	Non Bettors	Bettors	Illegal Bettors
Need excitement	3.71	2.87	4.24	4.70
Feel have excitement	4.33	3.78	4.68	5.04
Fullfillment score ^a	.62	.89	.44	.34

Scale: 1 (Not at all exciting) to 8 (Very exciting).

^aDerived by subtracting of "needs" from "have."

The next five needs also related to each other. Success, money, and savings are all materialistic needs that are unfulfilled. For both groups, more savings is the most discrepant factor followed by more money, with success lagging behind. They differ on perceptions of "chances to get ahead." Non-bettors feel they have significantly less chance to get ahead while bettors feel unfulfilled with respect to challenges.

Illegal bettors differ considerably from bettors in general in this area. Their lack of fulfillment in terms of success and money surges beyond that of bettors in general.

In the next two needs we see the different orientation more clearly. Both groups believe they have more hard work than they need but this complaint is especially strong among the bettors and while neither group feels they have enough time for recreation, the need is greater among bettors and especially illegal bettors. An over-abundance of excitement is more characteristic of only those who bet illegally. (Table 2.5-4)

These findings are summarized in Figure 2.5-1.

2.6 Perceptions of Luck and Skill

For bettors and non-bettors alike three games clearly are considered games of luck. These are the lottery, slot machines, and bingo. Numbers vies with these but, owing to the large number of people who don't know the game, is not specified as either a game of luck or skill. One game and one game only is characterized as a game of skill--card games. All other games have heavier luck components than skill components in the perception of both bettors and non-bettors.

Table 2.5-4

Needs and Need Fullfillment

	Mean Need ^a				Need Fullfillment ^b			
	Total Sample	Non Bettors	Bettors	Illegal Bettors	Total Sample	Non Bettors	Bettors	Illegal Bettors
Control over own life	5.85	5.45	6.11	6.18	-40	-32	-45	-30
Close, comfortable relationships	5.81	5.59	5.95	6.02	-3	-6	-1	+11
Interesting things to do	5.76	5.34	6.03	6.05	-50	-34	-60	-56
Things to look forward to	5.73	5.43	5.92	5.97	-9	-2	-13	-20
Well mannered associates	5.75	5.51	5.90	5.95	-23	-27	-20	-19
Success	5.41	5.04	5.65	5.93	-35	-38	-32	-75
Money	5.19	4.80	5.44	5.70	-112	-113	-112	-139
Chances to get ahead	5.09	4.69	5.35	5.69	-54	-63	-48	-43
Savings	5.03	4.68	5.25	5.36	-147	-144	-149	-148
Challenges	4.96	4.29	5.39	5.74	-19	-12	-24	-41
Time for Recreation	4.82	4.23	5.20	5.57	-33	-8	-49	-82
Hard work	4.47	4.40	4.51	4.64	+107	+79	+125	+115
Luck	3.99	3.61	4.23	4.58	-16	-8	-21	-47
Excitement	3.71	2.89	4.24	4.70	+62	+89	+44	+34
Power	3.17	2.85	3.38	3.71	+1	+2	0	-21

^aSee pages 55 and 56 of Appendix D: Questionnaire. Scale: 1(Not at all _____) to 8 (Very _____).

^bDerived by subtracting "need" from "have" scores and multiplying by 100 for ease of presentation.



However, participants of some of those games deviate significantly from other people, providing us with a more knowledgeable reading of the games themselves or at least of the players of these games.

The most significant departures are in sports betting of all kinds but especially in illegal sports betting activities. Sports card bettors and sports bookie bettors tell us that skill plays a much greater role. Generally speaking, players of horses and dogs also place more emphasis on skill but to a much lesser degree. On the other hand, numbers and lottery players tell us luck plays a bigger part than non-bettors of those activities do. (Table 2.6)

2.7 Perceptions of Fixing

There are many ways a game can be fixed and each game has special features which lend themselves to different methods. We did not specify what kind of fix when we asked bettors and non-bettors how likely they thought it was that each of ten games were fixed.

To the population at large, only high school sports seem beyond the reach of a fix. Every other gambling opportunity is perceived as dishonest at least some of the time. Bingo, lotteries, and college sports have the least negative image. On the average, people believe that professional sports are fixed sometimes while horse and dog races waver between fixed quite often and sometimes but closer to sometimes. Slot machines and casino games are expected to be fixed quite often while numbers is definitely perceived as a fixed game.

Figure 2.5-1

Differential Profile of Needs

	<u>Bettor</u>	<u>Non-bettor</u>	<u>Illegal Bettor</u>
<u>Seeks More:</u>	Control over own life Interesting things to do Things to look forward to Challenges Time for recreation Luck	Close, comfortable relationships Chances to get ahead Good-mannered Associates	Money Success Power
<u>Have More Than They Need of:</u>	Hard work	Excitement	Close, comfortable relationships

Table 2.7-1
 Perceptions of Fixing
 (Means ordered from Least to Most)

	Total Sample	Non Bettors	Bettors	Illegal Bettors	Bettors on Specific game
High school sports	4.43	4.30	4.49	4.46	NA
Bingo	3.88	3.58	4.01	3.92	4.24
College sports	3.87	3.73	3.94	3.89	4.00
Lottery	3.55	3.00	3.81	4.14	4.37
Professional sports	3.38	3.24	3.45	3.43	3.56
Horse races	2.89	2.69	2.99	2.96	2.94
Dog races	2.85	2.75	2.90	3.17	3.65
Slot Machines	2.35	2.17	2.44	2.41	NA
Casinos	2.32	2.13	2.41	2.54	3.05
Numbers	2.02	1.92	2.07	2.34	2.64

1 = Fixed most of time
 2 = Fixed pretty often
 3 = Fixed sometimes

4 = Almost never fixed
 5 = Never fixed

Table 2.7-2
 Perception of Fixing After Legalization

	Random Subset of Bettors			Non-bettors
	OTB %	Numbers %	Sports %	Gambling in General %
Legalization will lead to:				
<u>Change</u>	<u>36</u>	<u>55</u>	<u>54</u>	<u>53</u>
More	64	45	61	68
Less	36	55	39	32
<u>No change</u>	<u>53</u>	<u>41</u>	<u>42</u>	<u>23</u>
No answer	<u>11</u>	<u>4</u>	<u>4</u>	<u>24</u>

Table 2.6-1

Perceptions of Luck and Skill Involved in

13 Gambling Activities

	More Luck than Skill			Equal Luck and Skill			More Skill than Luck		
	Bettors %	Non Bettors %	Partici- pants %	Bettors %	Non Bettors %	Partici- pants %	Bettors %	Non Bettors %	Partici- pants %
Horses at track	51	45	48	30	21	32	17	13	20
Off track horses	53	45	50	25	16	26	16	11	19
Bingo	87	66	84	10	10	10	2	6	1
Lottery	92	66	94	4	6	4	1	5	1
Numbers	73	48	87	7	11	5	6	7	4
Slot machines	89	65	--	5	6	--	3	7	--
Gambling casinos	57	46	60	25	15	24	15	15	16
Sports cards	52	42	29	22	13	40	21	10	31
Sports--bookie	51	45	33	24	12	45	16	11	19
Sports--friends	44	45	40	33	16	37	19	11	22
Card games with friends	23	32	--	37	22	--	37	25	--
Dice	50	70	--	14	12	--	11	11	--
Dog tracks	58	46	47	21	16	24	14	9	30

Non-bettors are more cynical than bettors about games being fixed while illegal bettors and bettors in general do not differ significantly in this regard. Although bettors on each game, with the exception of horse races, consistently report the game they bet on is fixed less often than others, they still indicate a high probability that the game is fixed sometimes. Obviously, this is not a deterrent to gambling. Everyone, non-bettors, bettors, and people who play the horses, believes horse races are sometimes fixed.

When asked whether they thought legalization would lead to more or fewer fixes or no change, more bettors thought there would be no change for OTB and some change for numbers and sports. Those who thought there would be a change felt there would be more fixes after legalization in OTB and sports but fewer fixes in numbers after legalization. Non-bettors think legalization will lead to more fixes. (Table 2.7-2)

2.8 Gambling as a Leisure Time Activity

Many people think of gambling activities as simply one of many possible leisure time activities. With gambling defined in that way, i.e. a leisure activity, we felt it was important to ascertain just how much time was spent on gambling relative to other leisure time activities. While it was not feasible, given the scope of this study, to obtain the number of hours spent on each activity, it was felt that meaningful conclusions could be drawn from the number of days on which some time was devoted to each activity.

First it is apparent that even though large numbers of people participate in gambling, the number of days on which those activities are engaged is significantly lower than the number of days spent participating in other

Table 2.8-1

Average Number of Days on Which Activities are Enjoyed

	Participants
Read newspapers or magazines	233
Watch television	217
Relax, nap, etc.	117
Read books	110
Knit or do needlepoint, etc.	93
Home improvements, gardening	81
Socialize with friends or relatives	86
BET ON A NUMBER	71
Attend church related activities	58
Participate in active team sport	55
Participate in active non-team sport	55
Create arts and crafts	49
Go fishing, hunting, etc.	45
Nightclubs, bars, parties	33
Attend sports event	32
PLAY POOL OR BILLARDS FOR MONEY	31
BET IN A CHECK POOL	29
BET ON THE HORSES WITH A BOOKIE	29
Participate in community activities	28
BET ON SPORTS WITH A BOOKIE	28
BET ON OTB IN NEW YORK	28
PLAY MAHJONG FOR MONEY	27
PLAY CARDS WHERE SOMEONE NOT IN THE GAME TAKES A CUT	26
PLAY CARDS WITH FRIENDS FOR MONEY	25
BET ON A BOWLING GAME	22
Go to the movies or theatre	20
PLAY PINBALL MACHINE FOR MONEY	19
SHOOT DICE WITH FRIENDS	18
PLAY BINGO	13
Go to cultural events	12
BET ON SPORTS CARDS	10
BET ON MISCELLANEOUS EVENTS	10
GO TO THE DOG TRACK	10
PLAY BACKGAMMON FOR MONEY	10
PLAY CHESS, CHECKERS OR DOMINOS FOR MONEY	10
BET ON AUTO RACING	9
GO TO THE HORSE TRACK IN OWN STATE	8
GO TO THE TRACK IN ANOTHER STATE	7
GO TO A CASINO	7
GO TO JAI ALAI	5

types of leisure activities. (Table 2.8-1) There is one exception. Numbers players place a bet 70 days a year on the average, which, for purposes of comparison, is 13 more days a year than church members participate in church activities. Placing a bet on the numbers, however, takes only a few minutes, and cannot be regarded as a leisure activity in the sense of attending church functions. Seventy days a year means numbers players on the average bet more than once a week. Of course, some only bet once, while others bet almost every day of the year.

There are many gambling activities which on the average appear to be engaged in bi-weekly. These are betting on billiards, in check pools, betting on horses or sports with a bookie, mahjong games, card games, and bowling matches.

Bingo appears to be a once-a-month activity on the average, along with betting on sports cards, miscellaneous events, backgammon, chess or checkers, and attendance at dog tracks.

Auto racing and going to horse tracks near one's home appear to have only slightly less than once a month participation while the three gambling activities which are engaged in primarily away from home, as when on a vacation (horse tracks in another state, casinos, and Jai Alai) have, as expected, the lowest average number of days of participation.

A comparison of the patterns of non-gambling leisure time use for non-bettors, bettors and illegal bettors reveals that non-bettors spend more time in passive and home-based activities, while bettors spend comparatively more time in active, outside the home activities. Illegal bettors spend less time than others reading books and at church-related

and home-related activities, but more time than any other group at reading newspapers, away from home night-time activities, and observing and participating in team sports. (Table 2.8-2)

These findings appear consistent with gambling behavior. Non-bettors seek less stimulation, bettors seek stimulation and illegal bettors seek both stimulation and information relating to their betting from newspapers and the games themselves.

Table 2.8-2
Leisure Time Activities
(Average Number of Days in 1974)

	Non Bettors	Bettors	Illegal Bettors
Watch television	215	213	206
Read newspapers or magazines	181	227	239
Do nothing, nap, daydream	115	100	102
Read books	92	93	80
Home improvements, gardening	92	79	70
Socialize with friends and relatives	81	85	80
Church or related activities	77	43	37
Knitting, sewing, etc.	59	38	29
Fishing, hunting, camping, etc.	18	29	32
Arts and crafts	18	24	22
Community activities	15	17	24
Active non-team sports	13	36	34
Attend sports events	13	22	28
Active team sports	9	23	32
Movies or theatre	7	17	23
Nightclubs, bars, dancing	6	26	37
Operas, lectures, museums	6	7	10

CHAPTER THREE

ECONOMIC ASPECTS OF GAMBLING

3.1 Expenditures

Although in 1974, 61 percent of all Americans said they placed a bet, only 48 percent said they placed bets on one of the 12 forms of commercial gambling. The discrepancy results from those respondents who only place "friendly" bets. The wagers on commercial gambling in 1974 amounted to a total of \$22.4 billion. (Table 3.1-1) On a per capita basis, this amounts to almost \$150 per United States adult. When the average is restricted to those who bet, we find an average yearly wager of \$387 per bettor.

The \$22.4 billion ventured amounted to almost 2 percent of total 1974 United States personal income and--if taken as an outlay--would be comparable to the total amount United States families spent on restaurant meals and beverages or to the total outlay of American women for new clothes.

Such comparisons are, however, deceptive, for the cost of gambling to the consumer is not the amount ventured but the net outlay--the amount ventured minus winnings. Actual gambling expenditure, therefore, consists of the number of dollars taken out by the commercial operator from the total amount ventured. (This is the treatment accorded gambling outlays by the United States Department of Commerce in compiling total consumer expenditure in the national accounts.) Take-out rates vary widely from

Table 3.1-1

Total Handle in United States, 1974

Type	Estimate Derived from		Survey % over/under
	Sample	Published Data	
<u>Legal</u>			
Horses at track	\$ 7,930,000,000	\$ 7,512,000,000	+ 5.2
OTB, N.Y.	967,000,000	787,000,000	+18.6
Legal casinos	6,076,000,000	6,693,000,000	-10.1
Bingo	1,735,000,000	1,672,000,000	+ 3.6
Lotteries	639,000,000	681,000,000	- 6.6
Total 5 legal types	\$17,347,000,000	\$17,345,000,000	+ .01
<u>Illegal</u>			
Sports books	\$ 2,341,000,000		
Horse books	1,368,000,000		
Numbers	1,064,000,000		
Sports cards	191,000,000		
Casino games	110,000,000		
Total 5 illegal types	\$ 5,074,000,000		
TOTAL 10 TYPES	\$22,421,000,000		

about 4.5 percent on sports books and 15 to 18 percent at casinos and pari-mutuels to over 50 percent of the amount bet on lotteries and numbers, and 60 percent of wagers on sports cards.

When take-out rates are applied to the respective types of gambling in Table 3.1-1 it can be seen that net outlays for gambling amounted to about \$4.4 billion. This was an average net outlay of slightly more than \$30 per person over 18, and amounted to about 0.4 percent of personal income. In magnitude, net expenditure for betting compares to what American households spent on cigarettes and tobacco or for newspapers and magazines.

Americans make extensive use of illegal as well as legal opportunities to gamble, and both types have been included in the total. One of the important findings of this study is the relatively small volume of illegal gambling, for only 23 percent of total handle--slightly more than \$5 billion--consists of illegal bets on horses, sports, numbers, or casino games. This is an average of \$34 per person 18 or older in the population, but only about 10.9 percent of the population reported placing illegal bets. Illegal players ventured an average of \$312 on illegal bets during the year.

Again, however, these estimates of total wager exaggerate actual net outlay on gambling. If we apply take-out rates to handle, the net outlay of illegal gambling averages about \$7.20 per person aged 18+ or about \$67 per illegal bettor. As a total, then, illegal gambling represents a net outlay by consumers--and hence a gross profit to illegal operators--of slightly more than \$1 billion annually.

Table 3.1-2

Take out from U.S. Commercial Gambling, 1974

	Take out rate %	Total Take out ^a
<u>Legal</u>		
Horses at track	16.6	\$1,247,000,000
OTB, New York	21.0	171,000,000
Legal casinos	15.0	1,004,000,000
Bingo	33.0	551,000,000
Lotterias	55.0	374,000,000
<u>Total Legal</u>	19.3	3,347,000,000
<u>Illegal</u>		
Sports books	4.5	105,000,000
Horse books	16.6	227,000,000
Numbers	54.0	575,000,000
Sports cards	60.0	115,000,000
Casino games	15.0	19,000,000
<u>Total Illegal</u>	20.5	1,039,000,000
<u>Total Legal and Illegal</u>	19.6	4,385,000,000

^aBased on handle derived from the survey.

Accuracy of the Estimate. The estimate of total illegal gambling we have found is substantially below most of those frequently heard, and it is important to demonstrate its accuracy. One simple way to do this is to compare amounts estimated from our sample with those obtained from published reports of legal operations. Totals derived from the sample survey for individual types of gambling are remarkably close to those based on published sources, ranging from a 18.6 percent overestimate of the volume of off-track betting (OTB) in New York to a 10.1 percent underestimate of the handle of legal casinos. (Table 3.1-1) When the grand total is compiled individual errors tend to cancel, leaving an error of only about 0.01 percent in the grand total.

The precision with which estimates from our sample match what is known about legal betting lends confidence to the estimates obtained for illegal betting. At the same time, however, it must be borne in mind that all such estimates are subject to sampling variability. That is, findings will vary from sample to sample depending on the particular individuals who happen to be questioned in each case.

A measure of the range of variation to be expected is provided by the standard error of the estimate, a statistic that can be calculated from the data and used to set probable limits to the error in the sample estimate. In the case of illegal gambling, calculations indicate a standard error of about \$10 for the mean annual illegal bet per United States adult. According to sampling theory, this makes the chances six to one against a sample that would underestimate illegal handle by more than \$1.4 billion, and forty to one against an underestimate by as much as

\$2.8 billion, and over six hundred fifty to one against an underestimate as large as \$4.2 billion. This makes it certain that actual handle is less than double the sample estimate, even if the sample is badly underestimating the facts.

In these terms, while our estimate of \$5 billion for illegal gambling handle is subject to sampling variation, it is highly unlikely that the 1974 total was more than \$8 billion, and it is virtually inconceivable that it should be higher than \$10 billion.

Types of Gambling. Clearly, betting on horses in one form or another is the great pastime of American gamblers. The total amount ventured on horses, estimated from the sample, was nearly \$10.3 billion. Seventy-eight percent consisted of bets at the track, nine percent of legal off-track betting in New York, and only 13 percent represented play with illegal books. This amounted to \$72 per capita of the population at large, but since only 14.8 percent of the population are horse players, this comes to \$490 per gambler.

Legal casinos handled an estimated \$6,076,000,000, or about \$42 per capita aged 18 or older. This amounts to \$448 per person who reported casino gambling, almost exactly equal to the figure estimated for horse players. Illegal sports books turned over \$2.3 billion, an average of \$12 per capita of population at large or \$623 per sports bettor.

It is interesting to note that the amounts ventured in each of the three "action" types of gambling show relatively high averages per gambler. In contrast, participants in less active games like bingo, lotteries,

and numbers venture considerably smaller amounts. The total amount ventured at bingo is estimated at \$1.74 billion or \$12 per capita which comes to an average of only \$74 per player.

Numbers players ventured \$1.1 billion or \$7.38 per capita which corresponds to \$273 per player. Lotteries, although widely popular where they are in operation, attract only \$4.43 per capita of the United States population (\$12.71 per capita in states that provide lotteries) or \$25 per ticket buyer.

Sports cards are a relatively unimportant activity with a total handle of less than \$200 million which amounts to \$1.32 per capita of population, but this still comes to \$44 per player.

In terms of the net amount taken out by operators of games, Americans spent \$1.25 billion at horse tracks and another \$1 billion at casinos. Over half a billion dollars went to bingo games and more than a third of a billion to state lotteries. New Yorkers spent \$171,000,000 at legal off-track betting parlors. Total legal gambling absorbed \$3,347,000,000 or about 19.3 percent of the total amount bet. Another \$1,039,000,000 was spent on illegal gambling, over half of it on numbers with the rest divided among horse books, sports cards, and sports books and a small amount going to casino games. All told, the take out from illegal gambling averaged 20.5 percent of handle, almost identical to the average take out rate for legal gambling. Considering legal and illegal betting together, Americans spent a net total of \$4,385,000,000 on gambling during 1974.

Nevada Residents. On a per capita basis Nevada residents wager annually \$529 per capita compared to \$155 for the United States. In terms of income, Nevada bettors venture an average of 3.3 percent of family income compared to one percent average for the United States.

If the average American assumed the gambling behavior typical of Nevada residents, the total volume of United States wagering would be \$73 billion rather than the \$22 billion actually observed. Moreover, the illegal component of that total handle would be only \$1.9 billion compared to an estimated \$5 billion, even at the illegal participation rates characteristic of Nevada before reduction of the excise tax on gambling.

A disproportionate amount of this increased handle, however, would come from enlarged gambling participation by low income people and the overall regressivity of gambling would rise.

3.2 Income Incidence of Betting

Betting is related to income in two ways. In the first place, the proportion of people who gamble tends to rise with income. For example, as we have already seen, although 61 percent of all people gambled on something during 1974, only 25 percent of those with incomes under \$5,000, but almost 75 percent of those with incomes over \$15,000 participated. As Table 3.2-1 shows, similar relationships hold when we examine particular types of gambling. For example, although 15 percent of people living in states with parimutuel horse racing reported betting at the track during 1974, fewer than nine percent of those with incomes under \$5,000 but 18 percent of those with incomes \$15,000 or over participated.

This is a general tendency; although when individual types of gambling are examined separately, absolute numbers of participants observed in the sample become small, resulting in irregular fluctuations in behavior among some observed income groups. Among people with incomes in the \$5,000-\$10,000 bracket, for example, 15.5 percent went to the track at least once in 1974, whereas only 11.2 percent of those in the \$10,000-\$15,000 bracket reported so doing. Nevertheless, the general tendency for participation in gambling to rise with income holds for all individual types of gambling, including those like lottery and numbers that the public usually associates with low income people.

Size of Average Bet. The second way gambling behavior varies with income is in the amount ventured by those who bet. Here the relationship is much less clear than it is for participation, and it varies considerably from one type of gambling to another. In fact, only among patrons of sport books does the size of the average bet increase uniformly with income. For many games, the number of dollars ventured per bettor bears a "u-shaped" relationship to income with the smallest bets placed by bettors in middle income ranges. For example, off-track betting in New York City (OTB) attracted by far the heaviest betting of all games studied, averaging more than \$1000 annually per bettor, but among income groups, the highest averages were found in the very lowest and very highest income brackets, with substantially smaller average bets found among middle-income bettors. A similar pattern was found among those who patronized illegal horse books. In contrast, among those who bet at the track, annual bets by middle income bettors averaged higher than bets by those at the ends of the income scale.

Betting at casinos also follows the u-shaped pattern with bettors in the over \$30,000 income bracket reporting the highest average annual volume of bets (\$1,293 in 1974) but the second highest average (\$596) was found among bettors with incomes under \$5,000, and the lowest average (\$125) was found in the \$10,000-\$15,000 income bracket.

Several games were marked by a tendency for the amount bet to decline with bettors' income. Data for those who bet on sports cards, numbers, and lotteries exhibit this tendency. Average amounts bet by bingo players likewise trend downward as we look in higher income brackets, but less uniformly than with the other games.

Comparison among games shows some other interesting betting patterns. The highest average bets on lotteries, horse books, and OTB were placed by bettors with less than \$10,000 income. Largest bets on numbers, and sports cards were placed by those with incomes in the \$10,000 to \$15,000 bracket. Largest bets at the track were placed by bettors in the \$15,000-\$20,000 bracket, while those with incomes over \$30,000 placed the highest average in casinos and with sports books. Since average family income was about \$15,000 in 1974, the data indicate that the largest average bets on numbers, lotteries, bingo, horse books, sports cards, and OTB were placed by bettors with below-average family income. Highest bets at the track are laid by bettors with incomes near the average, whereas those with above-average incomes are the heaviest bettors at casinos and with sports books.

Average Annual Bet Per Capita. Since extent of participation and average amount ventured per bettor vary among income brackets in different

ways, a proper assessment of the overall relationship of gambling to income requires that the two be considered in combination. This has been done by multiplying the proportion of bettors in each income bracket by the average number of dollars bet per bettor to obtain average amounts bets per person. Even after taking account of the lower participation in gambling among lower income groups, however, we find the pattern of betting little affected. The highest average per capita bet on numbers, bingo, and sports cards is still found among people with below average incomes. Betting at tracks is still heaviest in the groups with just above average income and heaviest betting at casinos and sports books is found among the highest incomes.

Despite the differences in patterns for different types of gambling, when betting of all kinds is considered, we find a strong overall tendency for average per capita betting to rise with income. Among people with incomes under \$5,000, for example, total betting amounted to an average of less than \$65 per capita. This rose to over \$435 per capita among people with incomes over \$30,000.

Betting as a Percent of Income. From the standpoint of most social policy, the important question is not whether average betting grows with income, but whether it grows in proportion to income. That is, whether the percentage of income ventured on bets rises or declines as families move up in income.

Overall, Americans ventured 1.1 percent of family income on betting during 1974, but wagering constituted a higher fraction of low incomes than of higher incomes. Taking all forms of betting together, percent of income bet was more than twice as high among people with incomes under \$5,000 per

year than among those with incomes over \$30,000, reflecting a strong downward trend in percent of income bet as income rises.

This marked trend is found not only for betting as a whole, but for all individual types of gambling except two. Percentage of income bet with sports books rises with income, while percent of income ventured at casinos appears to follow something of a u-shaped trend.

Take-out and Income. Up to this point we have been concerned only with amount and percent of income ventured. The cost of gambling to any group, however, is not the amount ventured, but the number of dollars taken out and retained by operators of the games. This constitutes the net loss to participant groups and represents the cost of their participation. Take-out or net loss is readily calculated from amounts ventured by applying the take-out rate for each game. Take-out is shown with the other information in Table 3.2-1.

Since the take-out rate for any game is the same for all income groups, net expenditure on the game varies across income brackets exactly in proportion to amount bet. As shown at the bottom of Table 3.2-1, however, the total take-out from all games combined varies among income brackets according to the different popularity among games played. Indeed, by comparing the take-out from any income bracket with the amount ventured by all bettors in the bracket, we obtain the average take-out rate for gambling by players in that income group as shown in the table. Because low income bettors tend to favor numbers, lotteries, and other high take-out gambling, average take-out rates among these groups are high. The highest take-out is the 27.3 percent of amount bet by people in the \$5,000

Table 3.2-1
Gambling and Family Income, by Type of Game

	Family Income						
	Under \$5,000	\$5,000-10,000	\$10,000-15,000	\$15,000-20,000	\$20,000-30,000	\$30,000 and Over	Total Respondents ^a
Horses-track (States with legal tracks only)							
Percent who bet	8.7	15.5	11.2	17.2	20.9	20.3	15.9
Average annual bet per bettor	\$187.5	\$293.51	\$395.75	\$577.48	\$294.20	\$435.87	\$512.70
Average annual bet per capita	15.85	45.49	44.32	99.33	61.49	88.48	78.44
Average annual take-out per capita (take-out rate, 16.6%)	2.63	7.55	7.36	16.49	10.21	14.69	13.02
Horses-OTB (New York only)							
Percent who bet	9.9	14.8	21.2	27.3			13.5
Average annual bet per bettor	\$1594.97	\$353.75	\$743.37	\$1412.07			\$1118.35
Average annual bet per capita	157.90	52.36	157.59	385.48			150.98
Average annual take-out per capita (take-out rate, 21%)	33.16	11.00	33.09	80.95			31.71
Legal casinos							
Percent who bet	4.12	8.06	6.21	12.33	12.31	20.62	9.45
Average annual bet per bettor	\$586.57	\$193.17	\$124.33	\$336.57	\$261.70	\$1293.93	\$448.26
Average annual bet per capita	24.58	15.57	7.72	41.50	31.74	266.81	42.36
Average annual take-out per capita (take-out rate, 15%)	3.69	2.34	1.16	6.23	4.76	40.02	6.35
Bingo							
Percent who bet	8.68	18.84	20.27	21.56	22.05	17.17	18.73
Average annual bet per bettor	\$141.66	\$25.59	\$113.91	\$54.90	\$64.70	\$97.34	\$74.00
Average annual bet per capita	12.30	4.80	23.09	11.84	14.27	16.71	12.97
Average annual take-out per capita (take-out rate, 33%)	4.06	1.58	7.62	3.91	4.71	5.51	4.28
Lotteries (States with lotteries only)							
Percent who bet	30.6	45.5	52.5	60.0	57.4	50.6	47.8
Average annual bet per bettor	\$24.43	\$37.16	\$32.07	\$18.59	\$24.79	\$17.24	\$25.26
Average annual bet per capita	7.48	16.91	16.84	11.15	14.23	8.72	12.71
Average annual take-out per capita (take-out rate, 55%)	4.12	9.30	9.26	6.13	7.83	4.80	6.99
Sports books							
Percent who bet	0.79	1.21			3.00		1.91
Average annual bet per bettor	\$127.76	\$224.95			\$891.89		\$623.03
Average annual bet per capita	1.01	2.72			26.76		11.90
Average annual take-out per capita (take-out rate, 4.5%)	.05	.12			1.20		.54
Horse books							
Percent who bet	0.58	1.92	2.72	3.11	2.24	3.51	2.37
Average annual bet per bettor	\$38.87	\$932.29	\$335.16	\$159.70	\$578.35	\$606.64	\$416.53
Average annual bet per capita	2.25	17.90	9.12	4.97	12.96	21.29	9.87
Average annual take-out per capita (take-out rate, 16.6%)	.37	2.97	1.51	.83	2.15	3.53	1.64
Nur ers							
Percent who bet	1.20	3.56	2.71	3.39	2.87	4.84	3.01
Average annual bet per bettor	\$38.94	\$393.26	\$436.11	\$198.14	\$171.71	\$111.34	\$273.19
Average annual bet per capita	.47	14.00	11.82	6.72	4.93	5.39	7.38
Average annual take-out per capita (take-out rate, 54%)	.25	7.56	6.38	3.53	2.66	2.91	4.44
Sports cards							
Percent who bet	1.13	2.93	4.90	5.66	4.03	3.0	3.0
Average annual bet per bettor	\$48.56	\$111.56	\$28.61	\$10.91	\$30.12	\$43.70	\$43.70
Average annual bet per capita	.55	3.27	1.40	.62	1.21	1.32	1.32
Average annual take-out per capita (take out rate, 60%)	.33	1.96	.84	.37	.73	.83	.83
Total games^b							
Average bet per capita	\$63.46	\$116.23	\$133.99	\$203.69	\$167.00	\$435.35	\$177.86
Average take-out per capita	15.51	31.69	35.82	39.26	34.78	73.39	38.03
Effective take-out rate (percent)	24.5	27.3	26.9	19.3	20.9	16.9	21.5

^a Figures by income bracket include only individuals for whom both participation and income are available. Figures for total respondents include all individuals for whom we have participation data regardless of whether income is available.

^b Total games are sums of per capita items by type of game. Since figures for betting at the track are limited to residents of states with legal tracks, and betting on lotteries is limited to residents of states with lotteries, totals do not match corresponding observed totals for the entire United States.

to \$10,000 income bracket, and take-out rates paid by other below-income groups are also above the 21.5 percent average for all incomes. The lowest take-out rate is the 16.9 percent found among the highest income bettors and the rates paid by other above-average income groups are below the average for all.

Again the interesting question is the relationship of take-out or amount spent on gambling to income. Dividing income into take-out, we perceive a steady reduction in percent of income actually spent on gambling as income rises. (Table 3.2-2) For the United States as a whole, net expenditure for gambling was 0.25 percent of income, but the poorest people spent 0.62 percent of their income in this way compared to 0.18 percent in the highest bracket. The disposition of low-income families to spend a greater fraction of income on gambling makes gambling a regressive expenditure and, where used as a source of revenue, government receipts from gambling become a regressive tax.

There are, however, important differences among different types of gambling for some are more regressive than others. Indeed, the table indicates that gambling with sports books is actually progressive, that is, high income groups spend a greater proportion of their income this way than poorer people do.

Because percentages of income taken out are very small, it facilitates the study of differences among types of gambling to compare cumulative percentages of amounts spent on gambling with accumulated percentages of income. These cumulative percentages are shown in Table 3.2-3. Reading across the table, we see that people with incomes under \$5,000 received

Table 3.2-2
Regressivity by Type of Game

	Under \$5,000	\$5,000- 10,000	\$10,000- 15,000	\$15,000- 20,000	\$20,000- 30,000	\$30,000 and Over	Total
	%	\$	%	%	%	%	%
<u>Horses-track</u>							
Percent of income:							
Bet	0.63	0.61	0.35	0.57	0.25	0.22	0.50
Taken-out	0.105	0.101	0.059	0.094	0.041	0.037	0.083
<u>Horses-OTB</u>							
Percent of income:							
Bet		3.03	0.41	0.87		1.15	1.15
Taken-out		0.636	0.085	0.182		0.241	0.241
<u>Legal casinos</u>							
Percent of income:							
Bet	0.98	0.20	0.06	0.24	0.13	0.67	0.27
Taken-out	0.148	0.031	0.012	0.036	0.019	0.100	0.040
<u>Bingo</u>							
Percent of income:							
Bet	0.49	0.64	0.18	0.07	0.06	0.04	0.08
Taken-out	0.162	0.002	0.061	0.022	0.019	0.014	0.027
<u>Lotteries</u>							
Percent of income:							
Bet	0.30	0.23	0.13	0.06	0.06	0.02	0.08
Taken-out	0.16	0.12	0.07	0.04	0.03	0.01	0.05
<u>Sports books</u>							
Percent of income:							
Bet		0.02	0.02		0.11		0.08
Taken-out		0.001	0.001		0.005		0.003
<u>Horse books</u>							
Percent of income:							
Bet	0.09	0.24	0.07	0.03	0.05	0.05	0.06
Taken-out	0.015	0.040	0.012	0.005	0.009	0.008	0.010
<u>Numbers</u>							
Percent of income:							
Bet	0.02	0.19	0.09	0.04	0.02	0.01	0.05
Taken-out	0.010	0.101	0.051	0.021	0.011	0.007	0.028
<u>Sports cards</u>							
Percent of income:							
Bet		0.011	0.04	0.01	0.002	0.003	0.009
Taken-out		0.007	0.024	0.006	0.001	0.002	0.005
<u>Total</u>							
Percent of income:							
Bet	2.53	1.55	1.07	1.16	0.67	1.09	1.15
Taken-out	0.62	0.42	0.29	0.23	0.14	0.18	0.25

2.16 percent of total household income, but, for example, contributed 6.01 percent of total lottery take-out. The two lowest income groups combined--people with incomes under \$10,000--received 11.49 percent of total income, but contributed 24.68 percent of lottery take-out, and so on. As we continue down the columns, more and more families are included, so a larger percent of both total income and total take-out is included in the percentages shown. When the highest income bracket has been included, 100 percent of both income and take-out have been accounted for. The regressive nature of the lottery is shown by the fact that percent of lottery contribution exceeds percentage share of income all the way up the income scale, catching up to equality only at the highest income. In contrast, the column for sports books shows this type of gambling to be progressive, for percentages of total take-out contributed to sports bookies lags behind percentage of total increase all the way up the income scale.

Graphical Analysis by Lorenz Curves. The degree of regressiveness or progressiveness of various types of gambling are readily analysed by means of Lorenz Curves. The nature and use of these curves is conveniently demonstrated by application to lotteries in Figure 3.2-1. Accumulated percentages of income from Table 3.2-3 are plotted on the horizontal axis. The corresponding accumulated percentage of total contribution to lotteries is plotted vertically. Now, if each group contributed to the lottery take-out exactly in proportion to its share of total income, the relationship between income and contribution would correspond to the straight diagonal line. That is, the diagonal line would represent a situation in which families with incomes under \$5,000 (who receive 2.16 percent of all household

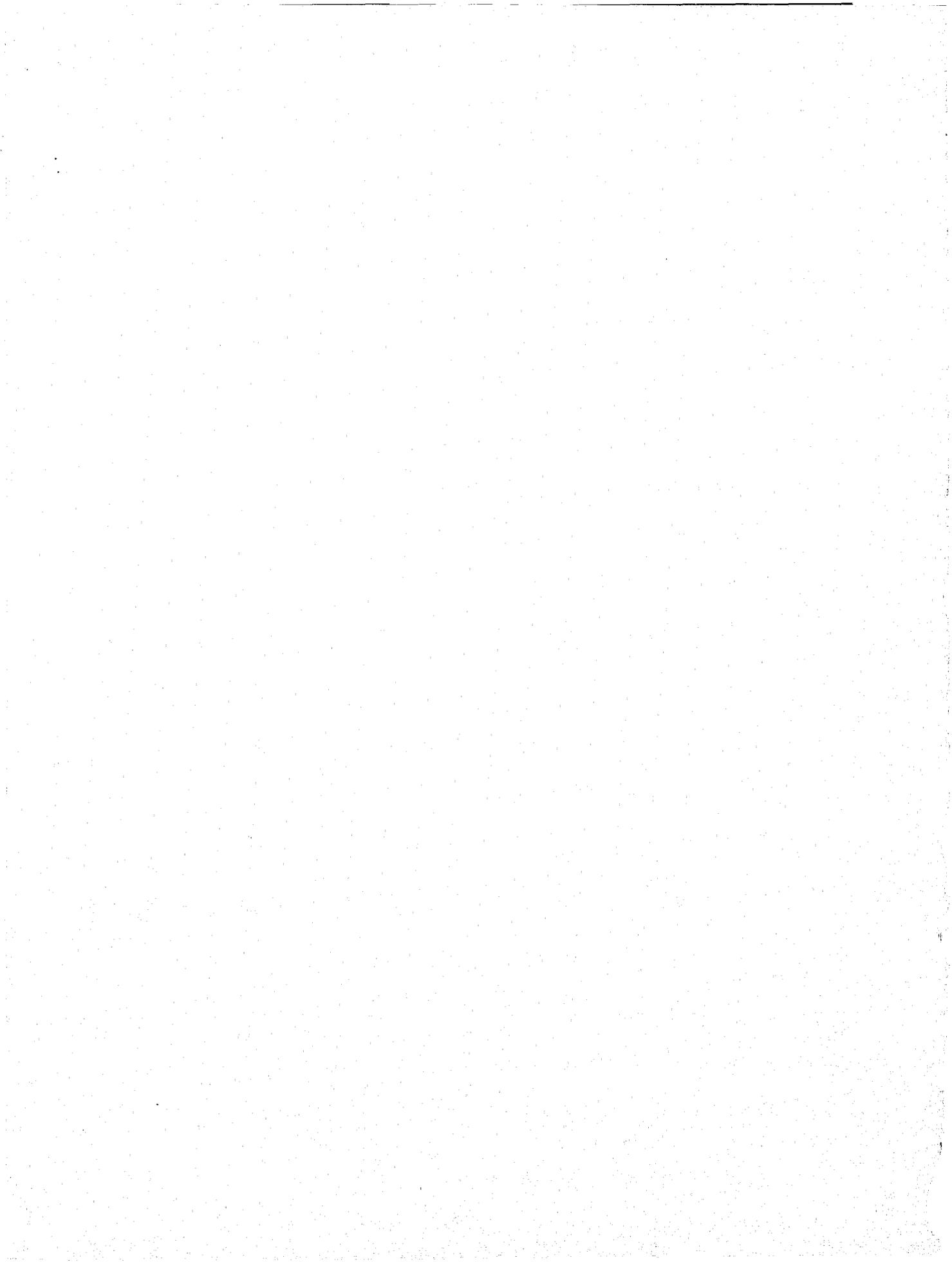


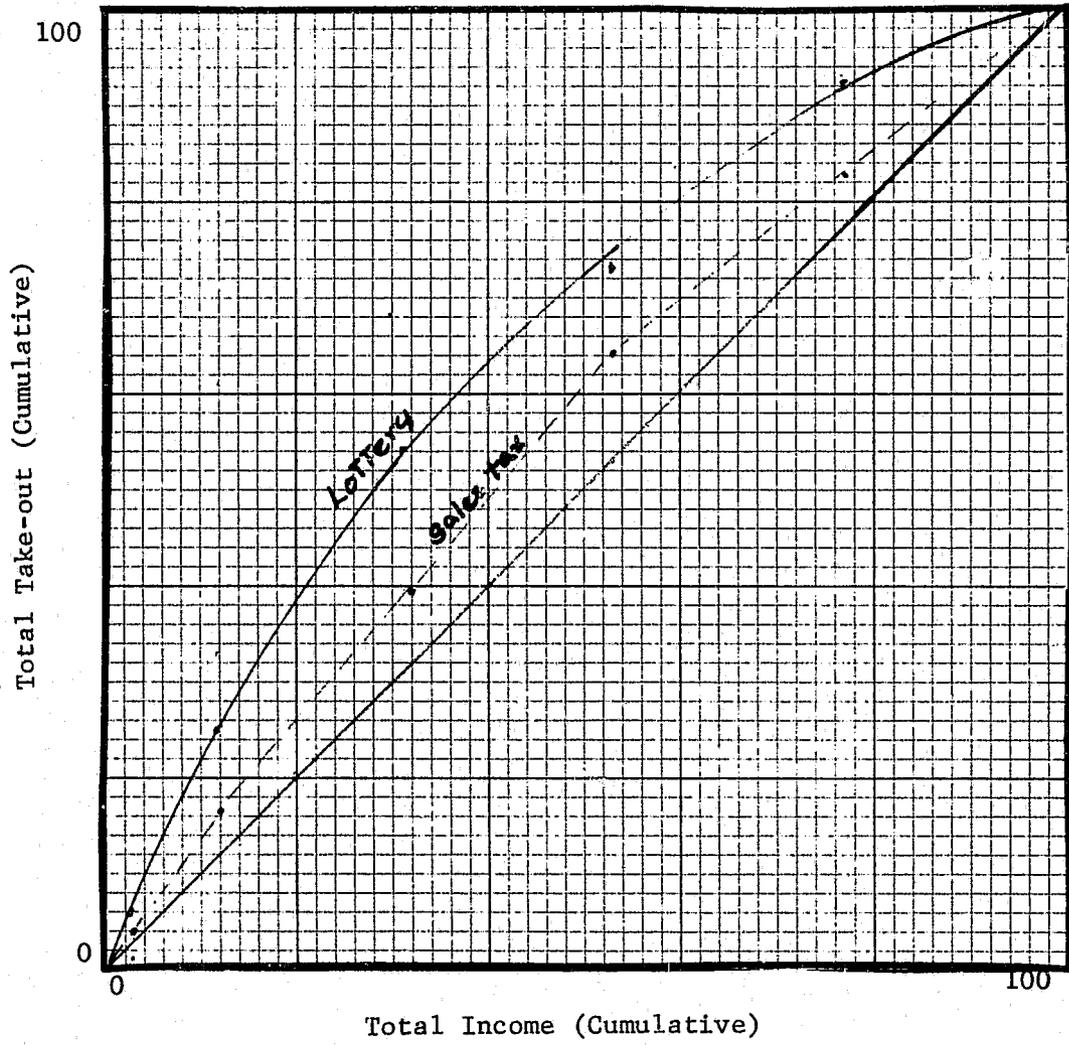
Table 3.2-3

Comparison of Cumulative Percentages of Family Income and Contribution
to Take-out by Game

Income	Percent of Total Income Earned by Families with Less than Indicated Income	Percent of Total Take-out Contributed by Those Who Gamble on:				
		Lottery	Numbers	Bingo	Sports Cards	Horse Bookie
\$5,000	2.16	6.01	0.79	11.74	4.81	2.80
\$10,000	11.49	24.68	33.48	18.35	11.69	34.93
\$15,000	30.71	53.90	68.27	57.61	69.18	55.18
\$20,000	52.81	71.41	84.76	74.17	86.97	64.25
\$30,000	76.73	91.77	93.90	89.21	92.95	82.06
Total	100.00	100.00	100.00	100.00	100.00	100.00

Income	Percent of Total Income Earned by Families with Less than Indicated Income	Percent of Total Take-out Contributed by Those Who Gamble on:			
		Horse Tracks	Sports Books	Casinos	Total
\$5,000	2.16	3.65	1.07	7.29	5.35
\$10,000	11.49	18.79	2.62	13.96	20.85
\$15,000	30.71	37.00	7.77	18.03	43.85
\$20,000	52.81	70.53	49.38	36.06	66.01
\$30,000	76.73	86.20	80.77	49.00	80.05
Total	100.00	100.00	100.00	100.00	100.00

Figure 3.2-1
Regressiveness of Lottery and Sales Tax



income) would contribute 2.16 percent of total lottery take-out. Families with incomes under \$10,000 (who receive 11.49 percent of total household income) would contribute 11.49 percent of total lottery take-out and so on.

In fact, of course, low income families make a disproportionate contribution to the lottery, and for this reason the points representing the lottery do not follow the diagonal line, but lie on a bow that arches above it. Moreover, the extent to which the curve arches away from the diagonal line is a convenient measure of the degree of regressivity, for the more regressive lottery gambling is, the greater the bow in the curve above the diagonal. In the most extreme case of regressivity possible, the bow would be pressed clear back against the left and upper boundaries of the figure.

The most convenient way to measure degree of regressivity, is by the fraction of the area of the upper triangle that is contained between the bow and the diagonal line. The less regressive any type of gambling is, the closer its curve approaches the diagonal, and the smaller the area of the bow compared to the total triangle. The more regressive the type, the greater the proportion of area under the bow. Inspection of Figure 3.2-1 suggests that the area between the lottery curve and the diagonal line represents something more than a quarter of the total triangle. This is borne out by more careful measuring which shows the area to be 31 percent of the total.

For purposes of comparison, a curve representing all federal, state and local sales and excise taxes is plotted on the same figure. Since the curve for sales taxes lies inside the lottery curve, it is clear that the lottery is considerably more regressive than the sales tax. Computation

reveals an index of regressivity of .17 for sales taxes compared to the .31 found for lotteries.

Regressiveness of Different Types of Gambling. Lorenz curves for all types of gambling for which sample information was obtained are plotted together in Figure 3.2-2 while calculated degree of regressivity appears in Table 3.2-4. Numbers and sports cards prove to be the most regressive types of gambling. Bingo is about the same as lotteries. Horse books are somewhat less regressive at high levels, and as a whole have a slightly lower degree of regressivity. Betting at casinos, on the other hand, is progressive, as indicated by the way the Lorenz Curve arches below the diagonal line of proportionality. Sports betting is highly progressive at low income levels, but becomes regressive at high incomes; on balance, however, it is somewhat more progressive than casino gambling.

Since all players are subject to the same take-out rates regardless of income, the size of the take-out for any given game does not directly affect its degree of regressivity. Yet it is interesting to note that the more regressive types of gambling are uniformly games with high take-out, whereas the only two types that represent a progressive relationship to income are the two with the lowest take-out rates. The low income bettor, it would appear, is given to ventures with high potential winnings offered under grossly unfair odds. The high income player is more given to getting the most action for his money by playing games with low potential winnings at somewhat better odds. When all types of gambling are combined, the index of regressivity is seen to be .17, not greatly different from that of excise and retail sales taxes.

Figure 3.2-2
Lorenz Curves for Types of Gambling

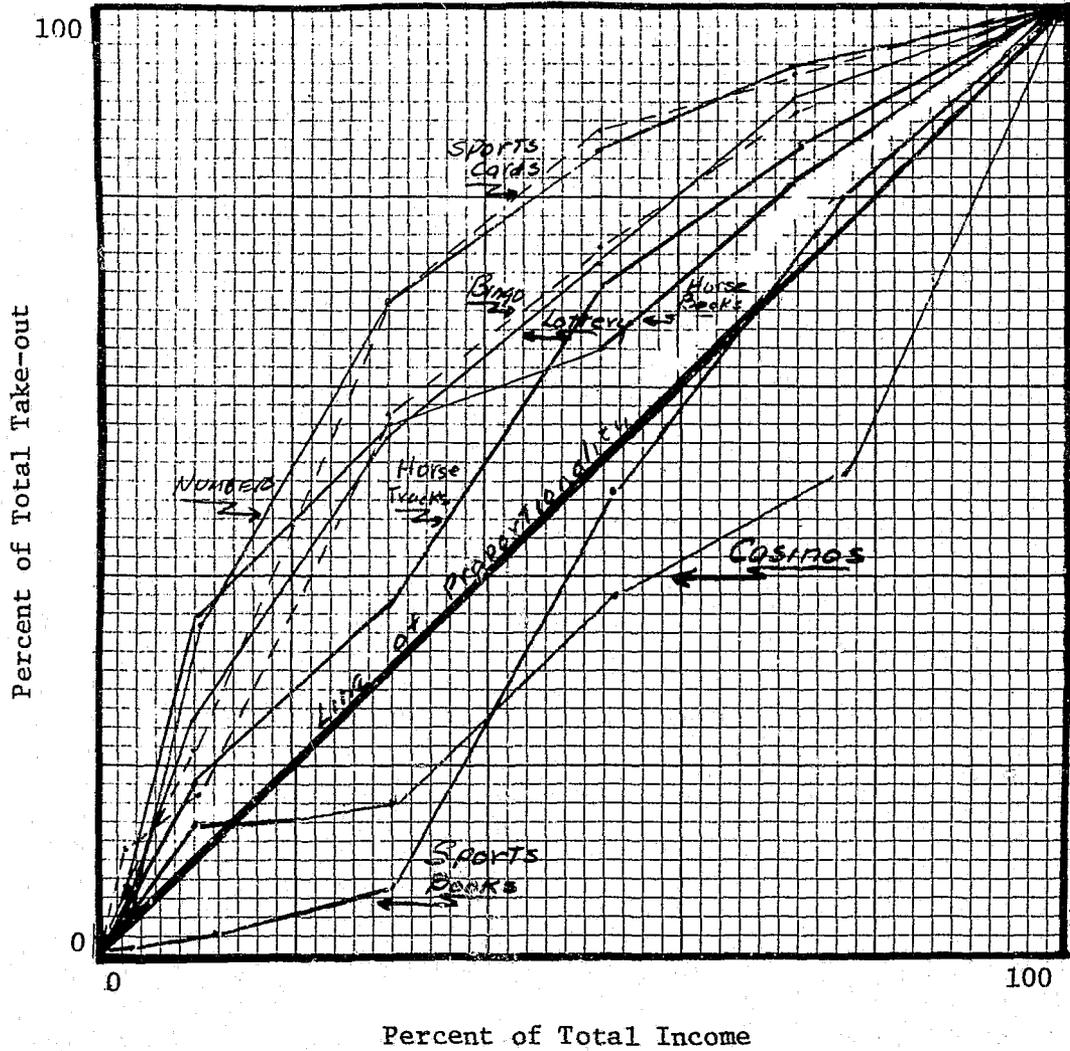


Table 3.2-4

Regressivity or Progressivity by Types of Gambling,
United States and Nevada Only

Game	Index of Progressivity (P) or Regressivity (R)	
	U.S. as a Whole	Nevada Residents Only
Numbers	.44 (R)	--
Sports cards	.40 (R)	<u>s/</u>
Lottery	.31 (R)	--
Bingo	.30 (R)	.58 (R)
Horse books	.27 (R)	<u>s/</u>
Horse tracks	.17 (R)	<u>s/</u>
Off-track horse betting parlors	.07 (R) ^a	.56 (R)
Slot machines	} .26 (P)	.41 (R)
Keno		n.a.
Casino tables		.46 (R)
Legal sports betting parlors	--	.36 (R)
Illegal sports books	.29 (P)	<u>s/</u>
All types combined	.17 (R)	.42 (R)
For comparison: all sales and excise taxes	.15 (R)	n.a.

^aNew York OTB only

s/ Sample too small to permit reliable estimate.

Regressivity in Nevada. Gambling is much more regressively related to income in Nevada than in the United States as a whole. (Table 3.2-4) The regressivity of total commercial gambling by Nevada residents is measured by a ratio of .42, compared to .17 for the United States. Some of the difference in regressivity is related to casino gambling. Residents of other states must travel to Nevada before they can participate, and costs of this travel act as a high admission fee to militate against participation by low income people. This gives casino gambling a progressive relationship to income (.26 P). Nevada residents, however, escape the high travel costs, and casino gambling is readily accessible to all income levels. As a result it becomes highly regressive.

But even where travel costs are universally low, as in the case of bingo, Nevada residents participate more heavily (24 percent vs. 19 percent for the United States), bet more heavily (\$104 average per bettor vs. \$69 for the United States) and bingo is much more regressive (.58 vs. .30 for the United States).

Comparison of the gambling behavior of residents of Nevada with the United States population at large strongly suggests that low income people are much more readily caught up in the social atmosphere of gambling than are the richer members of the community. It follows that the expanded popularity of gambling that accompanies extensive legalization also serves to increase the regressivity of gambling as a revenue source.

3.3 Revenue Potential of Legalizing Gambling

The revenue available from legalized gambling depends on a number of factors that are related in complex ways. Essentially, however, they reduce to three: potential demand, operating cost, and tax rate.

Demand is measured by the dollars ventured annually on the game and depends on the number, habits, income and background of people who live in the area from which the game draws. In addition, however, the number of dollars ventured depends on the price of playing the game as measured by the take-out rate. The larger the percentage taken out of the game by the operator the less action participants get for their money, fewer people are interested in the game and they are willing to venture less.

Since take-out rates are the sum of operating costs including profits, plus taxes, responses of players to take-out rates set an important limit to the revenue potential of a given game. Low taxes with accompanying low-take-out rate attracts customers but may leave little for the state after operating costs are covered. A high tax rate, on the other hand, may severely choke off demand and again leave the state with little or nothing. Maximum revenue for the state clearly requires a balance between the percent of each wager retained in tax and the number of dollars wagered. But exactly where this optimum is to be found depends on how sensitive to the rate players of the particular game prove to be.

Sensitivity to take-out is partly a matter of the game and its structure. Players will bet despite high take-out rates on games like lotteries, numbers, and sports cards that are characterized by very large prizes with low probability of winning whereas players in games that feature smaller

prizes will stop playing unless the prizes are reasonably commensurate with the odds. Responsiveness to take-out rates also depends on available alternatives. Because of the inconvenience and cost of visiting a track, many horse players are willing to pay a premium in the form of higher take-out rates at off-track betting parlors than at the track. Witness the 21 percent take-out at New York OTB parlors compared to 16.6 at nearby tracks. But the higher the differential becomes, the more customers will visit the track. Likewise, high take-out rates at off-track betting parlors encourage horse players to patronize illegal horse books that offer more attractive odds.

Little is known about responsiveness of players to take-out rate, and most of the estimates that follow are based on the take-out rates now applied. In estimating potential revenue from legal sports-betting and off-track horse betting parlors, however, some effort has been made to take account of this factor.

An additional important determinant both of total gambling behavior and the amount of revenue that can be raised by any given game is the extent to which gambling is a dynamic phenomenon that is affected by and in turn affects surrounding society. Legalization of one form of gambling has two effects. In the first place it tends to attract customers from other forms. This may reduce illegal gambling, but to the extent that competing forms of gambling are already part of the revenue system, the move is partly self-defeating, as was true of the establishment of off-track betting in New York. In the second place, adding to available legal forms of gambling attracts new customers, not only to gambling on the new

game, but, by adding to publicity and the atmosphere of acceptability of gambling in general, to other forms of gambling as well. This aspect of legalization has been evidenced in several parts of this study, where it was shown that total gambling participation tends to rise as the number of gambling facilities rises. When gambling becomes an omnipresent part of everyday life as in Nevada, participation rates rise to almost 80 percent of the adult population, and the average amount bet per participant rises likewise.

Although there is no way explicitly to include this dynamic in the following estimates, participation rates and average handle per bettor have been individually chosen to represent upper limits to what could reasonably be expected under the best conditions, and in combination undoubtedly overestimate the true revenue potential of all games combined even after allowing for the reinforcement of gambling behavior provided by the greater total availability of gambling facilities.

The final revenue estimates are shown in Table 3.3-1. As far as possible these are net figures, representing potential revenue after deduction of operating costs.

Lotteries. In 1974, \$681,000,000 in state lottery tickets were sold, yielding gross revenues of about \$374,000,000 to the states concerned. Not all this revenue was obtained from residents of lottery states, but 47.8 percent of all residents reported participating in the lottery, buying an average of \$23.73 worth of tickets during the year. Thus a good first approximation to potential lottery ticket sales should be about \$11.50

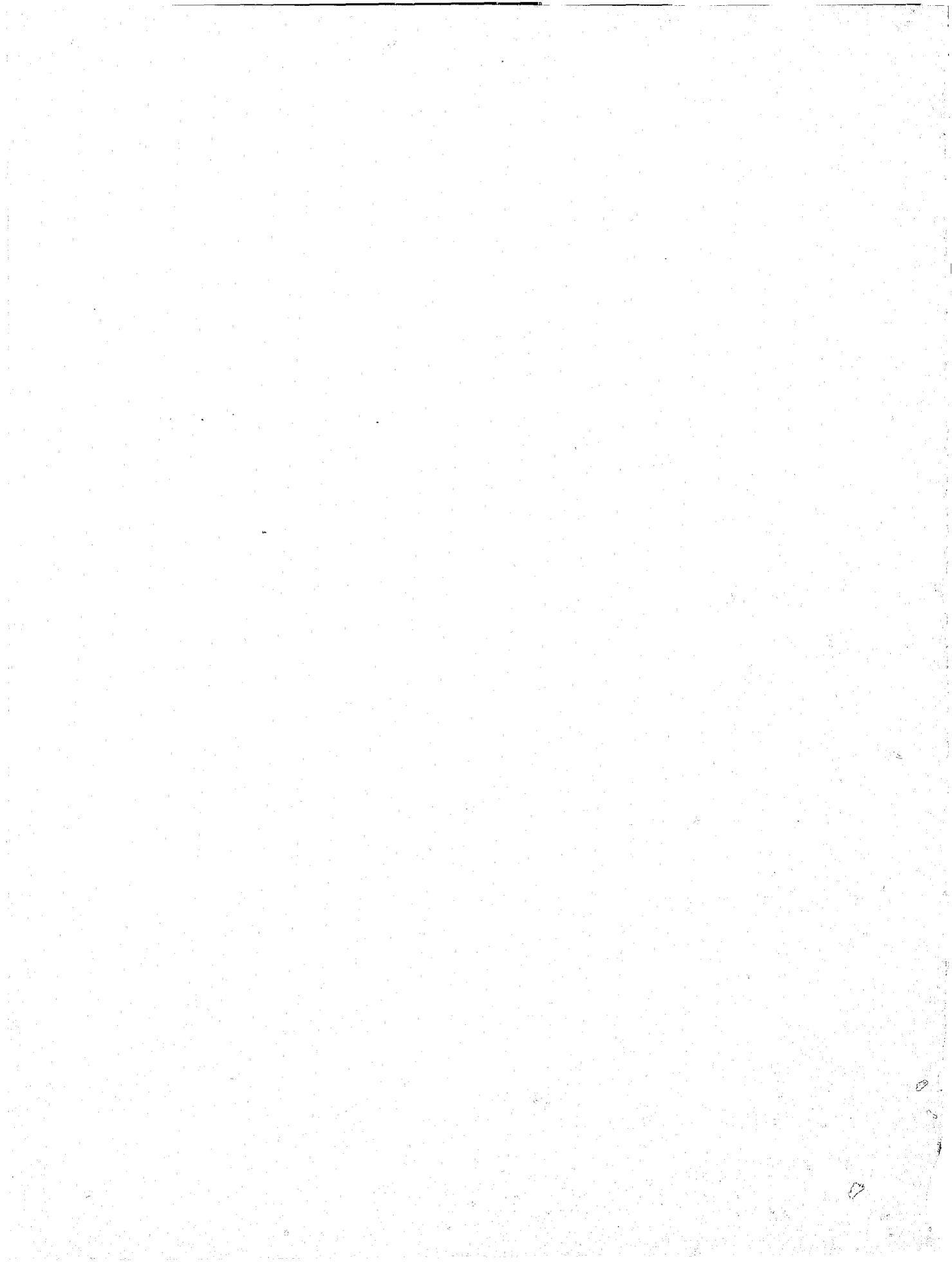


Table 3.3-1
Revenue Potential of Legalized Gambling

	Assumptions		Net State Revenue ^a Per Capita	Potential U.S. Total		
	Participation Rate (%)	Average Annual Handle Per Bettor Per Capita		Handle	Revenue	
Lottery	47.8	\$ 23.73	\$ 11.93	\$ 5.37	\$ 1,719,000,000	\$ 774,000,000
Numbers	50.0	100.00	50.00	22.50	7,296,000,000	3,243,000,000
Sports betting parlors	8.0	170.00	13.60	.98	1,960,000,000	141,000,000
Sports cards	10.0	50.00	5.00	2.50	721,000,000	360,000,000
Off-track horse betting	13.5	417.00	56.30	5.63	8,114,000,000	811,000,000
Horse tracks	25.8	841.00	217.00	16.28	31,276,000,000	2,346,000,000
Slot machines	72.1	377.00	279.00	2.72	40,212,000,000	392,000,000
Table games	27.3	846.00	231.00	1.73	33,294,000,000	249,000,000
Total, 8 games	n.a	n.a	864.00	57.71	124,527,000,000 ^b	8,288,000,000 ^b

^a Allowance has been made for operating costs of state-operated games.

^b Detail does not add to total due to rounding.

per adult. At a 55 percent take-out rate this implies gross revenue of about \$6.32 per capita of adult population. Since experience has shown that administrative costs absorb about 10 percent of total ticket sales, or about \$1.15 per capita, this leaves about \$5.17 net per adult yielding a net potential revenue of \$774,000,000 to the states.

This figure will, of course, vary with such factors as income and religious beliefs of state residents and will also depend on the total gambling context.

Legal State Numbers Game. During 1974 three percent of United States adults bet on numbers. If a legal numbers game provides the same service as present illegal games and at equivalent cost, there is every reason to suppose present illegal players would adopt it and bet as much as they do now. This sets the absolute minimum potential handle at \$ 6.20 per capita now observed for illegal numbers betting. But revenue potential is clearly higher than this. As now organized, numbers is an urban game. Of people living within 25 miles of the 25 largest metropolitan centers, 6.7 percent reported betting on numbers compared to only 0.8 percent of those living over 50 miles away. One important reason for this urban concentration is the illegal status of the game. Because it is illegal, numbers operation requires an elaborate labor-intensive network of writers, runners, and others whose employment is economical only where population is concentrated. Moreover, the game depends on word-of-mouth information in place of mass advertising and this is much more readily available in an urban setting.

Legalization of numbers would remove both these limitations. A legal numbers game can be mechanized and produced cheaply even in rural areas, and advertised like lotteries or race tracks. Therefore a legalized numbers game would attract greatly increased participation. It is instructive to note that 10.6 percent of New Jersey residents surveyed reported having purchased at least one PICKIT ticket, although the game had been in existence only two months at the time of the survey. Given time, participation should grow substantially and could conceivably approach the 50 percent level characteristic of state lotteries.

How much these bettors would venture is likewise an open question. Lottery players lay out an average of \$25 annually for lottery tickets, but it is clear that numbers is a more absorbing game that involves substantially more personal involvement than lotteries do. The difference lies in the characteristic of numbers by which bettors place bets on numbers of their own selection. This involves the bettor in vast areas of prognostication, dream interpretation, and related activities which makes the game a complete pastime.

This difference is reflected in the different behavior of bettors. About 2.4 percent of residents of lottery states (less than 5 percent of lottery players) reported spending \$100 or more annually for lottery tickets, and the largest reported bet was \$400 a year, whereas, despite the illegality of the game, one percent of the United States adult population (almost a third of all numbers players) reported wagering \$100 or more per year on numbers. Several bettors reported more than \$1000 annually, and the largest bet reported by a numbers player was \$8000 annually.

Dollars wagered on numbers are more akin to betting on horses than to buying lottery tickets. Bettors in states with horse tracks reported betting an average of over \$500 per year, and nine percent of bettors reported wagers of \$1000 or more per year. Similar wagers are reported by those who bet with illegal books.

On this basis, the average numbers bet should be expected to be considerably higher than that expected for the lottery, even with enlarged participation. Given the bet of \$267 wagered annually by the three percent of the adult population who participate in illegal numbers, it appears unreasonable to expect the annual handle from a greatly expanded number of participants to exceed \$100 per bettor. Allowing for a 55 percent takeout rate and 10 percent operating cost, this implies annual potential net revenue of no more than about \$22.50 per adult. On a 1974 population basis this would constitute a total of \$3.3 billion.

Sports Betting Parlors. Sports betting is a low take-out operation. Take out from legal sports betting parlors currently operating in Nevada averages about 10 percent, including the two percent federal excise tax on handle. Moreover, it is clear from Nevada experience that the volume of legal patronage is highly sensitive to take-out rate as it is affected by tax.

Table 3.3-2 compares amounts handled by Nevada sports betting parlors during the first three quarters of 1974, when the federal excise tax on such gambling was 10 percent of handle, with amount handled during the first three quarters of 1975, after the tax had been reduced to two percent.

Table 3.3-2

Effect of Reduction in Federal Excise Tax on Gambling
at Nevada Sports-Betting Parlors*

Year	Take-Out Rate			Handle per Quarter
	Federal Tax	Operator	Total	
1974	10	8	18	\$1,386,000
1975	2	8	10	4,957,000

*Source: Based on data supplied by Nevada Gaming Control Board. Dollar figures shown are averages of the first three quarters of each year.

Wagering on legal sports betting rose from the quarterly average of \$1,386,000 experienced during the first three quarters of 1974 to \$4,957,000 during the corresponding quarter of 1975. The principal cause of this 3.5-fold rise was the cut in take-out rate at legal parlors from about 18 percent to 10 percent. A substantial part of this increase doubtless represented a shift from illegal to legal operations. In our survey of Nevada residents, 2.9 percent of respondents reported patronage of illegal sports books during 1974 when the high excise tax rate was in effect, betting an average of \$275 per year. This compared to 8.1 percent who patronized legal sports betting parlors with an average bet of only \$158.

In any event, the gambling public proved to be so responsive to this reduction in cost of legal sports parlors that, as shown in Table 3.3-2 total take-out by operators and federal government combined rose sharply. Yet federal tax revenue declined, for expansion of handle was insufficient to make up for the tax reduction.

The federal excise tax on gambling had never been designed as an important revenue source and reduced yield was a secondary consideration in this instance, but the example has general applicability. Bettors are quite sensitive to take-out rates, particularly where alternative services are available and attempts to rely on gambling as a revenue source must confront this basic fact.

The Nevada experience suggests that the price elasticity of sports-parlor betting is about -2.1. That is, a 1 percent reduction in take out (i.e. reduction of take-out rate from, say 10 to 9.9 percent) tends to expand handle by about 2.1 percent. Under these circumstances, the tax rate that yields the maximum excise tax revenue depends on operating costs.

Allowing 8 percent of handle as operating cost would give maximum tax yield at an excise tax rate of about 7.2 percent.¹ If this rate had been in effect in 1975, we would expect Nevada to have shown a legal handle of about \$2,000,000 and federal excise tax revenue of \$144,000 per quarter in 1975.

Taking the Nevada experience as a basis for participation, legal sports books might be expected to attract 8 percent of adults, betting an average of \$170 per bettor as at Nevada sports-betting parlors. These figures imply an annual handle of \$13.60 per adult. With a 7.2 percent tax on handle, we arrive at an average per capita tax yield of \$.98 in potential revenue. This would have been a total of \$141,250,000 annually in 1974.

Sports Cards. Like lotteries and numbers, sports cards constitute a high take-out game. Indeed the estimated take-out rate of 60 percent makes it the highest of all games studied. The number of adults who play, 3.2 percent of the population, is close to the 3.0 percent figure for numbers,

¹If elasticity of demand is E , tax rate is t percent and operating cost c percent of handle respectively, the handle is given by

$$H = D \left[\frac{t + c}{100} \right]^{-E}$$

where D is the level of demand as influenced by all other factors except take out. Tax yield Y is the product of tax rate and handle so

$$Y = \frac{t}{100} D \left[\frac{t + c}{100} \right]^{-E}$$

This expression reaches a maximum for tax rate $t^* = \frac{c}{E-1}$.

but--despite the clear potential of sports cards as a pastime with intense personal involvement--betting is more nearly like that on lotteries. The average player ventured only \$44 annually on the game.

In view of American involvement with sports, one would expect high participation in a legalized game, but it is notable that in Nevada where sports cards are legal, only three percent of residents bet on them. One reason for low participation may be the high price embodied in the high take-out rate. Another may be that those bettors most interested in sports prefer the game-by-game, low take-out action provided by sports books. That is, the very nature of sports cards may make them less appealing because the player wins only by correctly predicting the outcome of several games simultaneously. This means he derives no satisfaction or reinforcement from correctly predicting some of the results.

It would appear to follow that sports cards are not a promising source of revenue. Take-out from 1974 illegal handle was \$115,000,000 annually--less than \$.80 per adult--even before allowance for operating costs. In view of the behavior of Nevada residents, legalization would not be expected to improve much on this performance. As an outside estimate, we might expect participation to rise to 10 percent of adults with an average annual bet of \$50 per bettor. This would yield an annual handle of \$5 per adult, or a total of \$721,000,000. Allowing 10 percent for operating cost, net state revenue would be \$2.50 per adult or a total of about \$360,000,000 annually.

Off-track Betting Parlors. The off-track betting parlor is subject to two kinds of substitutes: betting at the track and betting with illegal books, but the two substitutes present different problems from a revenue point of view. When players shift between betting at the track and betting at off-track parlors, the total revenue effect is associated only with differential tax rates applied at the two places and possibly with difference in tax jurisdictions, whereas shifts between either of these and illegal books affect total tax revenue profoundly.

Bettors surveyed expressed three reasons to prefer illegal books to legal betting parlors: (1) The illegal take-out is lower since it is not subject to special taxes levied on the legal parlor. In New York this tax amounts to 5 percent of the value of winning tickets, or about a little more than 4 percent of total handle. In Nevada the federal excise tax is absorbed by operators. (2) Illegal winnings avoid the federal income tax. This is a strange perception. Most legal winnings go unreported by the parimutuel agency, and are therefore no less easily (and no more illegally) left unreported by the bettor as taxable income than illegal winnings. Of course pay out of a large win is accompanied by an IRS information form, but this form is filed only on winnings of at least \$600 at odds of more than 299 to 1. In other words, no formal report of winnings is made to IRS unless a \$2 ticket pays \$600. Nevertheless, the belief is widespread among horse-players that IRS has agents stationed at tracks to identify large winners. Regardless of the facts, this belief helps account for a strong preference by many players for the confidentiality provided by illegal operators. (3) Telephone service and credit are provided by illegal operators. Telephone service is available to patrons of New York OTB, but only to those who maintain a credit balance in their deposit account. Illegal books operate on credit with periodic settlement of accounts.

Of these three objectives, the last is most easily overcome. Although deposit accounts minimize collection costs, and yield interest income on the deposited amounts, net gain from these sources is probably smaller than the loss resulting from reduced business. Illegal bookies clearly believe this to be the case and operate without the assistance of case advances.¹

Nothing can be done about the second point. There appears to be no way to exempt winnings on legal wagers from income taxation without making legal wagering into a readily accessible and low cost way to launder and legitimize illegal and other income that had evaded the income tax.²

The first objection addresses the question of the price of off-track parlors compared to illegal facilities. The higher the tax rate applied, the greater the stimulus to bettors to gamble illegally. As in the case of sports books, some idea of the responsiveness of bettors to differences in take-out can be had from the Nevada experience with reduction of the Federal excise tax as shown in Table 3.3-3.

During the 1974 period, legal bookmakers in Nevada added the 10 percent federal excise tax to the bet. Thus a "two-dollar" bet actually cost the bettor \$2.20. The betting parlor then paid the bet at track odds for a \$2 bet, so take-out at a horse parlor amounted to \$.20, added on top for the excise tax, plus \$.33 (16 percent of the \$2 bet), or a total of \$.52.

¹It is, of course, popularly believed that illegal bookmakers are able to extend credit because of their willingness to resort to strong-arm collection methods to minimize bad debts. Yet Nevada casinos routinely extend credit and show a bad-debt ratio of roughly three percent of total takeout. An equal rate at a horse parlor would amount to less than 1/2 of 1 percent of handle.

²With a 17 percent take-out rate a \$2 bet on every entry in a race returns an average of \$1.66 per entry. This would legitimize income at a cost of only 17 percent.

Table 3.3-3

Effect of Reduction in Federal Excise Tax on Gambling
at Nevada Horse-Betting Parlors*

Year	Take-Out Rate		Total	Handle per Quarter
	Federal Tax	Operator		
1974	9.1 ^a	14.5 ^a	23.6	\$5,055,000
1975	2	14	16	9,556,000

*Note: Based on data supplied by Nevada Gaming Control Board.

^aPercent of bettors \$2.20 outlay.

This was 23.6 percent of the \$2.20 ventured by the bettor. After reduction of the tax to 2 percent, betting parlors apparently accepted \$2 bets without additional tax and paid track odds, thus absorbing the remaining 2 percent excise tax. This reduced the take-out rate to 16 percent. In response, handle at legal Nevada horse parlors rose from an average of \$5,055,000 per quarter to \$9,556,000, an increase of 89 percent. If this is characteristic of the nation as a whole, the elasticity of demand for legal off-track betting is about -1.6.¹

The tax rate that will maximize state revenue under these circumstances depends on the cost of the betting operation, including not only the costs of the parlor itself, but the contribution the parlor must make to the track to maintain the quality of races and insure that the track itself remains in operation.² Since 7 percent of total parimutuel handle at the track is retained for operations, the figure for off-track horse betting parlors should probably be somewhat lower, but on the basis of a 7 percent operating cost, the optimum tax on off-track betting should be no more than 11.7 percent of handle. At this rate, the total take-out rate should be about 18.7 percent. (Compare 17 percent at New York tracks and 21 percent at New York OTB.)

¹This elasticity agrees exactly with one developed from analysis of a moving cross section of data obtained from 24 states that supplied thoroughbred racing during the years 1949-1971. Demand for racing was estimated by the regression:

$$H_{it} = 37.45 + .011Y_{it} + .134d_{it}^* - 334t_{it} + 570Q_{it} \quad (R^2 = .81)$$

(0.001) _{it} (.018) _{it} (47) _{it}

In this expression, subscript *i* refers to state and *t* to year. H_{it} represents per capita thoroughbred track handle in state *i* during year *t*, as Y_{it} relates to Y_{it} , per capita income of the state during that year, d_{it}^* , number of racing days divided by population, t_{it} takeout rate and Q_{it} , a dummy variable to identify small states. Figures in parentheses are standard errors.

Evaluating elasticity with respect to take-out rate at the mean of the sample gives an elasticity of -1.6 in exact agreement with the Nevada data.

²See footnote page 125.

This suggests that to gain maximum revenue at the expense of illegal operations, off-track betting parlors should pay track odds without additional tax, since loss of customers from additional taxation more than balances gain from the tax. This policy likewise maintains betting at the track on something like an equal footing with the off-track operation.

Even with extra taxes, 13.5 percent of New Yorkers patronized OTB. In the New York area where interest is especially high, bettors reported an average wager of \$1118 per year. For the purpose of revenue estimates, however, it seems more reasonable to expect average bets to be closer to the \$417 per year wagered nationwide at illegal books. At New York participation rates, this would constitute an off-track handle of \$56.30 per adult of which the state would collect about 10 percent or \$5.63 per capita, or a total of about \$811 million.

In arriving at this figure no effort has been made to estimate the amount of the shift in betting between tracks and betting parlors, nor how this shift would affect the tracks themselves.

Betting at Tracks. During 1974 a total of \$8.7 billion or \$60 per American adult was wagered on parimutuel betting at race tracks. About \$7.5 billion of this was handled at horse tracks and an additional \$1.2 million at dog tracks. Of this total, about 17 percent or nearly \$1.5 billion was taken out, of which about \$650 million accrued to states as revenue.

The total revenue potential of parimutuel racing, however, is more difficult to assess than that from any other form of gambling because demand varies sharply with distance from the track. During 1974, 15.9 percent of adult residents of states that provide horse tracks bet at the track, compared to only 9.2 percent of residents of other states, but participation rises to include 25.8 percent of the residents of the New York-New Jersey metropolitan area within which race tracks are much more accessible than in most areas.

A careful study of the revenue potential of race tracks should go further and concentrate on the betting behavior of the population residing within 50 or 100 miles of operating tracks. In the absence of such information, the behavior of residents of the New York-New Jersey metropolitan area can be taken as an indication of what might be expected from greatly increased availability of tracks.

The closer and more conveniently located tracks are, the more frequently bettors will patronize them and consequently the larger the annual handle per bettor will become. In states where tracks operate, bettors average \$448 per year, but bettors living within 25 miles of any of the 25 largest metropolitan areas average \$841 per year in wagers, and this might be taken as an approximation to what would be expected in general

with ready access to tracks.

Under circumstances where 25.8 percent of adult population ventures an average of \$841 annually, total handle would average about \$217 per adult, of which about 7.5 percent or \$16.28 per adult would accrue as revenue to the state.

Table Games. Unlike most other forms of gambling which permit an unambiguous definition of handle on the basis of discrete events (purchase of a lottery ticket or placing a bet on a particular sports event), table games like craps, roulette, and black jack involve continuous play over a period of time. Thus, although table games are characterized by very low take-out on each individual play, the proportion of his initial stake a player has lost by the time he goes home is largely a function of how long he plays.

In other words, if players habitually keep playing as long as their money lasts, the take-out rate would be 100 percent of their initial stake regardless of odds in the game. It appears, however, that behavior of players results in a take-out rate in the neighborhood of 15 percent of the initial stake, and this has been used for revenue estimation.

In Nevada, where table games are readily available, 27.3 percent of residents reported playing table games. Initial stakes taken to the casino averaged \$846 per player each year. On this basis, the total handle attributable to Nevada residents was \$231 per capita per year. Application of the 15 percent rate gives an estimated \$34.65 taken out annually per adult. In Nevada this is subject to the gambling tax that averages 5 percent. At this tax rate, table games yield state revenue of about \$1.73 per adult resident, or \$250,000,000 nationwide.

Slot Machines. In Nevada, 72.1 percent of residents reported playing slot machines. The problem of defining "handle" for slot machines is similar to that for table games. Respondents were asked "When you went to play slot machines, how much money did you usually take to play?" The answer, multiplied by the number of times respondent reported playing during the year, constituted the "handle." On this basis, bettors ventured an average of \$377 yearly on the game. Take-out rates for slot machines are not publicly available, but it appears unlikely that they are much above 15 percent.

The operator's revenue from slot machines is subject to the graduated Nevada tax on gambling proceeds which averages about 5 percent of take-out. Although slot-machine players are known to be highly sensitive to real or imagined differences in pay-out as among establishments and individual machines, there is no evidence as to their responsiveness to differences in overall level of take-out rate. As a basis for setting an upper limit, we suppose that a tax of 10 percent of take-out would not materially restrict demand. This would represent a revenue yield of \$2.72 per adult or \$392,000,000.

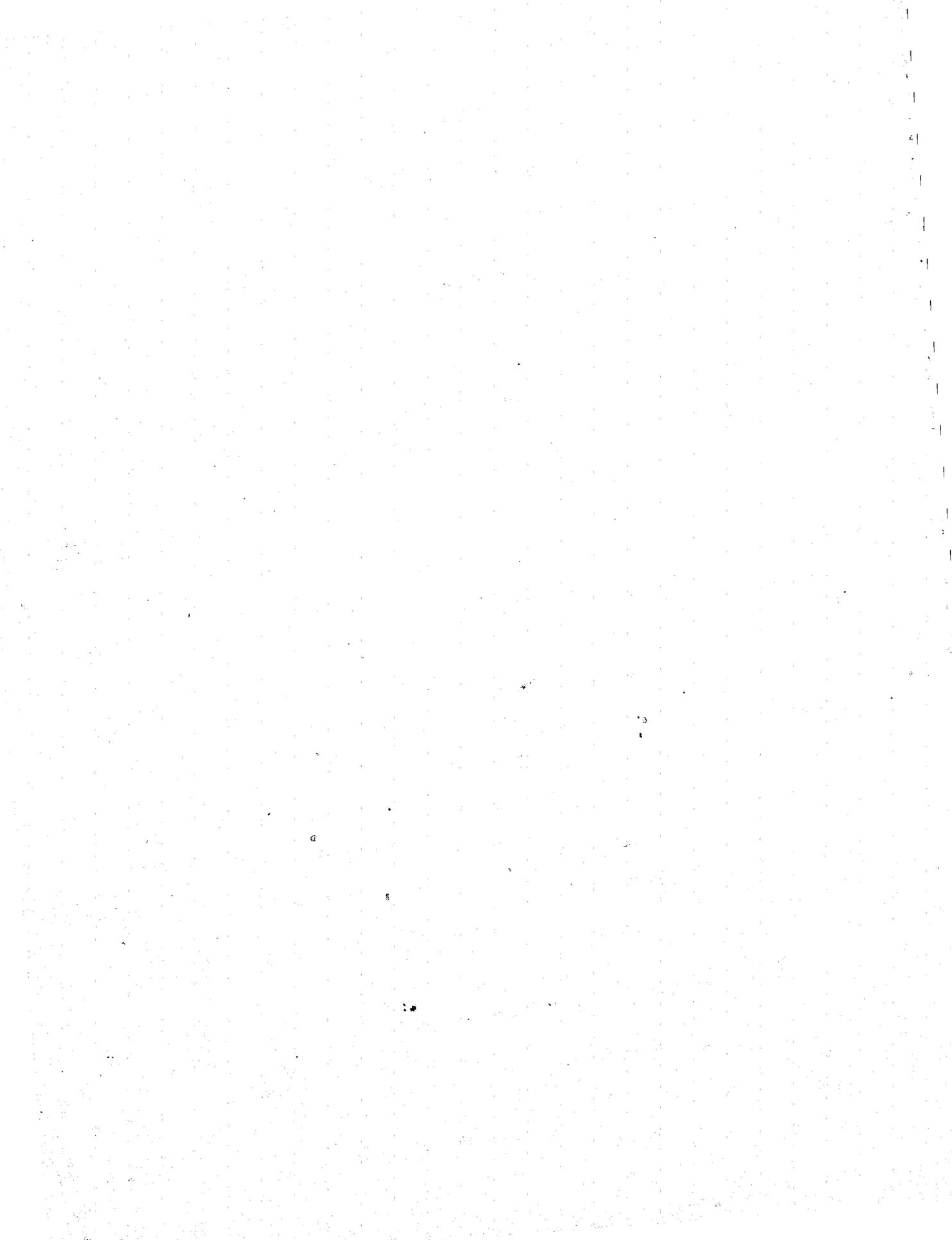
Total Revenue. In arriving at estimates for individual games we have attempted to determine the maximum to be expected from each game, taking one game at a time. We have completely neglected the possible influence of legalization of one game on participation in another. Clearly these are two opposite influences. On the one hand, as results elsewhere in this study show, legalization of one form of gambling contributes to the total acceptability of gambling as a whole and tends to increase total gambling participation. On the other hand, appearance of one game may attract bettors from others. Given the way in which our results were derived, it is reasonable to suppose that

their greatest weakness lies in absence of information about the latter possibility. In this event the revenue potential of \$8,288,000,000 shown in the table for all games combined must be viewed as an upper limit and an overestimate of the revenue potential probably available from gambling.

Moreover, it should be borne in mind that a substantial part of this revenue is already being realized. Existing lotteries yield \$256,000,000--nearly half of the potential shown for the game, existing OTB yields \$122,000,000 or 15% of nationwide potential and an additional \$600,000,000--about a quarter of the potential shown--is already being collected by taxes on parimutuel betting at horse tracks. Somewhat smaller amounts are being collected from other games where they are legal.

Legalization of numbers is the largest untapped revenue source. This single game amounts to over 40 percent of estimated revenue potential. It should be noted, however, that the estimate is based on the extreme assumption that participation in legal numbers would match that observed for lotteries. Any application of the estimate should be made with this important qualification in mind.

One final caveat is in order. These estimates are prepared on an "internal revenue" basis, by which each state taps the revenue from gambling by its own residents. The current revenue to the state of Nevada comes, of course, not only from its own residents but mostly from visitors from other states. One or two other states that established a similarly attractive gambling environment could likewise gain revenue at the expense of visitors, but as gambling becomes more and more widespread, interstate visitation tends to cancel out and states must ultimately depend on their own residents for revenue. It is on this basis that estimates have been compiled.



CHAPTER FOUR

LEGALIZATION OF GAMBLING

4.1 Knowledge of Gambling Laws

Wherever horse tracks, off-track betting, bingo, state lotteries, or dog tracks are legal, most people say they are aware of the legal status of each, but in each of these cases approximately 10 percent are wrong because they think of these activities as illegal when indeed they are not. This is not the case for the one other legal operation, Pickit. Over a fourth of the people living in New Jersey say they don't know Pickit is a legal game in their state and an additional 14 percent think it is an illegal game. However, since Pickit went into operation in May of 1975, only two months before the time of the survey, this might account for the lack of knowledge we found.

On the other hand, in states where horse tracks, off-track betting, and lotteries are not legal, only three quarters of the people say they are aware they are not legal. Most of the others are unsure. Bingo is a different matter entirely. In states where bingo is not legal, about the same number of people think it is legal as think it is not, while 16 percent say they are not sure. In actuality, they have every reason to be confused since bingo games are almost equally available in both sets of states.

None of the other eight games are legal anywhere except in Nevada, which has been excluded from this analysis.¹ Six of these: slot machines,

1. See Chapter Eleven for an analysis of Nevada gambling.

Table 4.1

Respondents Knowledge of the Laws in Their States

	State Laws	
	Legal	Not Legal
	%	%
Horse Tracks		
Believe legal	82	5
Believe illegal	10	76
Don't know	8	19
Off Track Betting		
Believe legal	86*	9
Believe illegal	12	71
Don't know	2	20
Bingo		
Believe legal	76	43
Believe illegal	15	41
Don't know	9	16
State Lottery		
Believe legal	88	8
Believe illegal	8	73
Don't know	4	19
Numbers or Pickit		
Believe legal	59**	1
Believe illegal	14	75
Don't know	27	24
Dog Tracks		
Believe legal	78	20***
Believe illegal	12	65
Don't know	10	15
Slot Machines		
Believe legal		5
Believe illegal		80
Don't know		15
Gambling Casinos		
Believe legal		3
Believe illegal		83
Don't know		14
Sports Cards or Sheet		
Believe legal		4
Believe illegal		75
Don't know		21
Sports Events with a bookie		
Believe legal		1
Believe Illegal		84
Don't know		15
Pro Sports excluding friends		
Believe legal		3
Believe illegal		81
Don't know		16
College Sports excluding friends		
Believe legal		2
Believe illegal		83
Don't know		15
High School Sports excluding friends		
Believe legal		2
Believe illegal		83
Don't know		15

* NYC residents only

** New Jersey residents only

***Based on the total sample based on the question:
"Which of these are legal in your state now?"

casinos, sports events with bookies, and betting on pro, college, or high school sports other than with friends are illegal according to 80 to 85 percent of the United States population, while most of the rest say they don't know. Only 75 percent believe numbers and sports cards are illegal. (Table 4.1)

4.2 Attitudes Towards Legalization

About 80 percent of the respondents say they are interested in legalizing at least one of the 13 gambling activities we questioned them about, (Table 4.2-1) but there is so little consensus on which games should be legal that no one game, unless it is believed already legal, is favored for legalization by a majority of adults in the United States.

Bingo is an excellent example because it heads the list in terms of favorability. Sixty-eight percent of the total population say they favor legal bingo, 21 percent say they do not, eight percent are unsure, and three percent did not respond to our questions about bingo. (Table 4.2-2) The 68 percent favorable responses, however, are a product of 82 percent favorable responses from people who tell us bingo is already legal in their state and 48 percent favorable responses from people who tell us bingo is not legal in their state. (Table 4.2-3) Despite some clouding due to misunderstanding of the laws, the overall conclusion still holds--even for bingo a majority of adult Americans in the United States do not favor legalizing the game where it is not already legal. In fact, people who live in states where bingo, horse tracks, or state lotteries are legal, but are unaware of their legal status, report they are less

Table 4.2-1

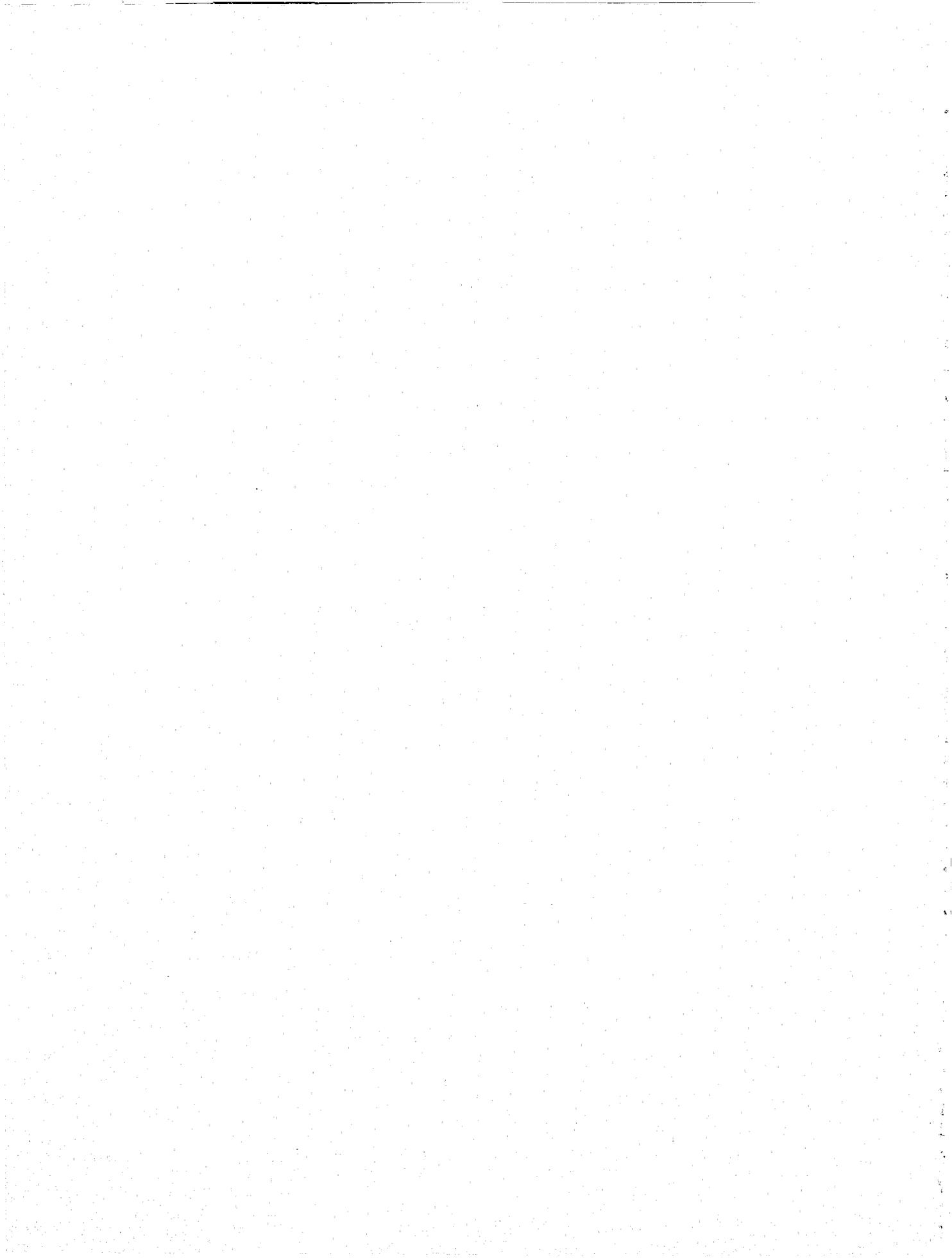
Distribution of Index of Favorability

	Total Sample %	State Laws				1974 Participation	
		No Legal Facilities %	One Legal Facility %	Two Legal Facilities %	Three Legal Facilities %	Non Better %	Better %
<u>Favorable to legalizing:</u>							
Nothing	20	40	21	10	5	45	4
One game	7	10	9	4	4	11	5
Two games	8	8	7	11	7	11	7
Three games	7	4	8	6	7	5	8
Four games	8	4	7	10	10	6	9
Five games	7	7	5	10	7	4	8
Six games	8	5	7	10	10	3	11
Seven games	6	5	4	9	8	2	9
Eight games	5	3	7	4	8	1	8
Nine games	6	3	7	5	7	3	7
Ten games	5	3	5	5	5	2	6
Eleven games	5	1	6	4	11	2	7
Twelve games	4	2	3	4	5	2	5
Thirteen games	4	5	4	8	6	3	6
	100%	100%	100%	100%	100%	100%	100%

Based on the questions: "...which of these are legal in your state now?" "Any others?" and if legal, "Would you like to see _____ continued or would you like to see it abolished?" and if not legal "...How do you feel about making _____ legal? Are you definitely in favor of legalizing it, do you tend to be in favor of legalizing it, do you tend to be against legalizing it, or are you definitely against legalizing it?"

CONTINUED

2 OF 7



favorably disposed toward their legalization than those who live in states where they are not actually legal. Nevertheless, in no single case did we find a majority, that is over 50 percent, saying they want bingo or horse tracks or state lotteries made legal in their state when it was not already legal or believed to be legal. (Table 4.2-4)

Even though no game would easily win a referendum, if there were one, some games are more desirable than others. Restricting our observations to those individuals who believe an activity is not legal and desire to make it legal, we find bingo tops the list with 48 percent in favor, closely followed by horse tracks and state lotteries each with 47 percent in favor, followed by dog tracks, slot machines, and gambling casinos with 44, 40 and 40 percent respectively in favor, off-track betting with 36 percent, sports cards and professional sports betting with 32 and 30 percent respectively, and at the bottom of the list, numbers with 22 percent, college sports betting with 22 percent, bookie sports betting with 20 percent, and high school sports betting with 16 percent reported favorability toward legalization. (Table 4.2-3)

Let us remember that when 48 or 47 or 44 percent of the people say they are in favor of legalization of a game, it does not follow that all others are against it. Some are unsure of how they feel and would make up their minds only after listening to the arguments both pro and con that would accompany an effort to legalize a game in their state. (Table 4.2-4) On the other hand, there are strong indications in this study that most people favor the status quo.

Table 4.2-2

Attitudes Toward Legalization

	Positive %	Negative %	Unsure %	NA %
Bingo	68	21	8	2
Horse tracks	62	26	10	6
State lottery	61	29	6	4
Pickit*	60	12	17	11
Dog tracks	49	42	5	4
Slot machines	40	53	3	4
Gambling casinos	40	52	4	4
Off-track betting	38	51	5	6
Sports cards or sheets	32	54	8	6
Pro sports betting	31	61	4	4
Numbers, bolitas, policy	22	60	12	6
College sports betting	22	72	3	3
Sports events with bookie	20	71	3	6
High school sports betting	16	77	3	4

*New Jersey residents only

See Table 4.2-1 for questions asked.

Positive equals continue plus definitely plus tend to be in favor of legalizing.

Negative equals abolish plus definitely against plus tend to be against definitely legalizing.

Table 4.2-3

Components of Positive Attitudes Toward Legalization

	Total Positive Toward Legalization %	Desire To Continue An Already Legal Facility ^a %	Desire To Make An Illegal Activity Legal %
Bingo	68	82	48
Off Track Betting (N.Y.)	67	69	--
Horse Tracks	62	73	47
State Lotteries	61	81	47
Picket	60	91	--
Dog Tracks	49	72	44
Slot Machines	40	53	40
Gambling Casinos	40	65	40
Off Track Betting	38	65	36
Sports Cards or Sheets	32	63	32
Pro Sports Betting	31	60	30
Numbers, Bolitas, Policy	22	36	22
College Sports Betting	22	68	22
Bookie Sports Betting	20	42	20
H. S. Sports Betting	16	62	16

See Table 4.2-1 for questions asked.

^aThis is a perceived legality which is incorrect in some cases.

Table 4.2-4

Attitudes Towards Legalization by State Laws

	State Laws		Total Sample %
	Game is Legal %	Game is Not Legal %	
<hr/>			
<u>Bingo</u>			
Total positive	73	63	68
Continue	82	81**	82
Make legal	46*	50	48
<u>Horse Tracks</u>			
Total positive	67	50	62
Continue	73	71*	73
Make legal	39*	50	47
<u>State Lottery</u>			
Total positive	77	49	61
Continue	81	72*	81
Make legal	39*	48	47

* Based on responses of individuals whose knowledge of their state law is incorrect--sample size is small.

** Based on responses of individuals whose knowledge of their state law is incorrect--sample is substantial.

The difference in attitudes toward legalization between people who believe something is not legal and those who believe it is legal, whether correct or not, is only one of the components in understanding who is favorably inclined to legalize gambling games, and who is not. A major source of variation is whether a person now bets on that game through whatever channels are available to him. In each case, those who actually bet on the game say they are more favorable to its becoming legal than those who do not bet on it. Because they bet on something does not, however, automatically make them desire its legality. In fact, only games which have a history of legality, i.e. bingo, horse tracks, state lotteries, and dog tracks, have practically full acceptability among their own participants (93-95 percent). Off-track betting has unusually high acceptability as a legal game among people who place bets on the horses with a bookie (84 percent). This is the only instance in which current players of any game give a higher ranking than the rest of the population. Betting participants on all other games, while favoring their legalization, still rank the games essentially as the total population does. Looking at the total population, no illegal game has a majority saying they are in favor of its legalization. However, with the exception of betting on college and high-school sports and with sports bookies, a majority of bettors on each illegal game do favor its legalization.

Among the questions posed were "How do you feel about making betting on sports with a bookie legal?" and "Restricting your answer to bets other than bets with friends, how do you feel about making betting on professional sports events legal?" Although the questions seem to refer

Table 4.2-5

Attitude Towards Legalization by Participation

	Total Sample %	Current Bettors %
Bingo	68	94
Horse Tracks	62	94
State Lotteries	61	93
Pickit	60	NA
Dog Tracks	49	95
Slot Machine	40	69 ^a
Casinos	40	73
Off Track Betting	38	84
Sports Cards or Sheets	32	73
Pro Sports Betting	31	68
Numbers, Bolitas or Policy	22	69
College Sports Betting	22	47
Bookie Sports Betting	20	49
High School Sports Betting	16	27 ^b

^aCasino better base.

^bAny illegal sports bettor base.

to very similar things, we got quite different answers. Sixty-eight percent said they favored legalizing professional sports betting but only 49 percent said they favored legalizing bookie betting. There are two ways of accounting for the difference in attitudes. First, favorability toward legalized bookie betting is adversely affected by the possibility of college and high school sports betting. Second, and more likely, is that respondents are expressing less interest in legalizing bookies than in establishing sports parlors. (Table 4.2-5)

Regional Differences. Another major factor which influences attitudes towards legalization is the geographic region. The Northeast region of the United States has the greatest variety and quantity of legal gambling. In addition to bingo, tracks, and lotteries, New York has legal off-track betting, New Jersey has recently legalized a numbers game, and Connecticut is planning Jai Alai, lotteries, and is considering legalizing other games. Wherever games are already legally in operation in the Northeast, approximately 85 percent say they want to keep them that way, with the exception of horsetracks which has a somewhat lower constituency in favor of keeping it (74 percent). In those parts of the Northeast where bingo is not already legal an absolute majority is in favor of making it legal. No other illegal game in the Northeast is favored for legalization by a majority. Horse races, dog tracks and casinos reach 48 and 47 percent favorably, respectively, followed by off-track betting and slot machines with 43 and 41 percent.

Table 4.2-6

Comparison of Reported and Actual Legal Status
of Four Commercial Games by Region of the United States

	Total		Northeast		North Central		South		West	
	act.	rep.	act.	rep.	act.	rep.	act.	rep.	act.	rep.
	%	%	%	%	%	%	%	%	%	%
Lottery										
Legal	44	43	99	98	55	57	18	8	0	14
Not legal	56	44	1	1	45	35	82	68	100	73
Bingo										
Legal	55	61	65	85	83	77	32	40	37	42
Not legal	45	27	35	11	17	16	68	39	63	45
Horse Tracks										
Legal	70	59	89	81	60	47	52	40	92	84
Not legal	30	30	11	16	40	41	48	42	8	7
Dog Tracks										
Legal	18	20	15	21	5	10	32	25	20	23
Not legal	82	65	85	69	95	73	68	54	80	65

- Notes. (1) Reported state laws do not add to 100% due to a varying number of "don't know" responses.
- (2) Actual refers to proportion of "sample" living in states where activity is legal. It is not proportion of states within the region with legal games specified.

Table 4.2-7

Favorability to Legalization by Region of Country

	Northeast %	North Central %	South %	West %
<u>Bingo</u>				
Total positive	83	76	51	66
Continue	87	80	75	83
Make legal	64	62	36	56
<u>Horse Tracks</u>				
Total positive	69	63	51	73
Continue	74	68	69	81
Make legal	47	59	39	*
<u>State Lotteries</u>				
Total positive	84	68	37	62
Continue	85	78	64	81
Make legal	*	56	36	59
<u>Dog Tracks</u>				
Total positive	55	51	40	52
Continue	84	58	64	83
Make legal	48	51	33	44
<u>Slot Machines</u>				
Total positive	42	43	31	48
Make legal	41	44	31	47
<u>Casinos</u>				
Total positive	47	43	28	49
Make legal	47	43	28	48
<u>Off Track Betting</u>				
Total positive	50	40	27	39
Make legal	43	41	28	38
<u>Sports Cards or Sheets</u>				
Total positive	37	39	22	31
Make legal	38	37	22	29
<u>Pro Sports Betting</u>				
Total positive	34	33	25	34
Make legal	34	34	25	32
<u>Numbers, Bolitas, Policy</u>				
Total positive	37	18	17	18
Make legal	37	18	17	18
<u>College Sports Betting</u>				
Total positive	23	26	17	22
Make legal	23	25	17	19
<u>Bookie Sports Betting</u>				
Total positive	23	25	14	20
Make legal	23	24	14	21
<u>High School Sports Betting</u>				
Total positive	16	20	14	15
Make legal	16	10	13	13

* Small sample size

Sports cards, numbers, and pro-sports betting are favored by over a third of those in the Northeast, college and high school sports and sports books by less than 25 percent each. The only totally divergent pattern of favorability in the Northeast compared to other parts of the country is the numbers game. Thirty-seven percent of adults in the Northeast say they want numbers made legal, which is twice the proportion favoring its legalization in any other part of the United States. Even there, an absolute majority (54 percent) oppose its legalization.

People living in the North Central portion of the United States are the most favorably disposed group to making horse tracks, bingo, dog tracks, and lotteries legal where they are not already legal. All four have majority support. While the continuation of games already legal is supported by large numbers in the North Central states, the proportion in favor of their continuation is less than in the Northeast and West of the United States. The North Central region parallels the Northeast region on favorability towards legalization of other games with the exception of numbers, as previously noted.

There are significantly fewer legal gambling facilities in the South of this country and except for bingo, Southerners are not particularly aware of those that do exist. Only horse tracks are available to more than 50 percent of the South's population. We have previously pointed out that people strive to maintain the status quo and that betting participation is lower in the South. Therefore it is not surprising that desire to legalize any gambling game is significantly lower in the South. In fact no games not already legal in the state have as many

as 40 percent who say they are in favor of their legalization anywhere in the South. Even desire for continuation of legal games is lower here, with an average of two thirds in favor of continuation.

The West has an unusual pattern of legal betting facilities. There are no state lotteries, but practically everyone has access to legal horse tracks. Legal bingo is available to only slightly more than one third of the population. Wherever some form of gambling is legal, there is a strong constituency that wants to keep it that way. There is also a majority who say they are in favor of making bingo and state lotteries legal where not already legal. No other games achieve a favorable majority in the West but there is more support for slot machines and casinos than anywhere else (47 and 48 percent). (Tables 4.2-6 and 4.2-7)

In summary, there is no solid support for legalization of games not already legal, with the exception of bingo in the Northeast and North Central regions; horse tracks and dog tracks in the North Central region; and state lotteries in the North Central and Western regions. Wherever games are legal now, a sizable majority favors their continuation. State laws and current betting participation affect attitudes toward legalization. The more legal facilities there are already in the state, the larger the proportion of people living in those states who say they are favorable to legalizing more gambling games. Bettors are more favorable to legalizing gambling games than non-bettors. Bettors on each game are the most favorable but even among them there is no consensus that their game should be legal and there is no majority in favor of legalizing college, high school, or bookie sports betting even among its practitioners.

Finally, across the nation 88-97 percent expressed definite views on the question of gambling legalization.

Demographic Differences. Attitudes toward legalization also vary by demographic group. Interest in legalization declines with age. In some instances (OTB, lotteries, numbers, casinos, and sports books) it is higher among the 25 to 44 year age group than the 18 to 24 year group, but then declines. Without exception males say they are more favorable to legalization than females. With the exception of bingo, lotteries, sports cards, and dog tracks, non-whites give more favorable opinions about legalization than whites.

Jews are more favorable to legalization than Catholics, who are more favorable to it than Protestants. There are three minor exceptions: Catholics say they are more favorably disposed toward the legalization of sports cards and betting on college and high school sports than Jews say they are.

With only one exception more divorced and never-married individuals favor legalization than married people. The exception is off-track betting where married people follow divorced but are ahead of never-married individuals. Widowed individuals are always least favorable.

Favorability to legalization tends to rise with income, but there are several notable exceptions. Favorability towards legalization of slot machines is lowest in the low income bracket, rises in the \$5,000 to \$10,000 a year group and holds steady beyond that. Favorability to legalizing sports books declines in the \$10,000-\$15,000 bracket but then continues to climb with income. Favorability to legalizing college and

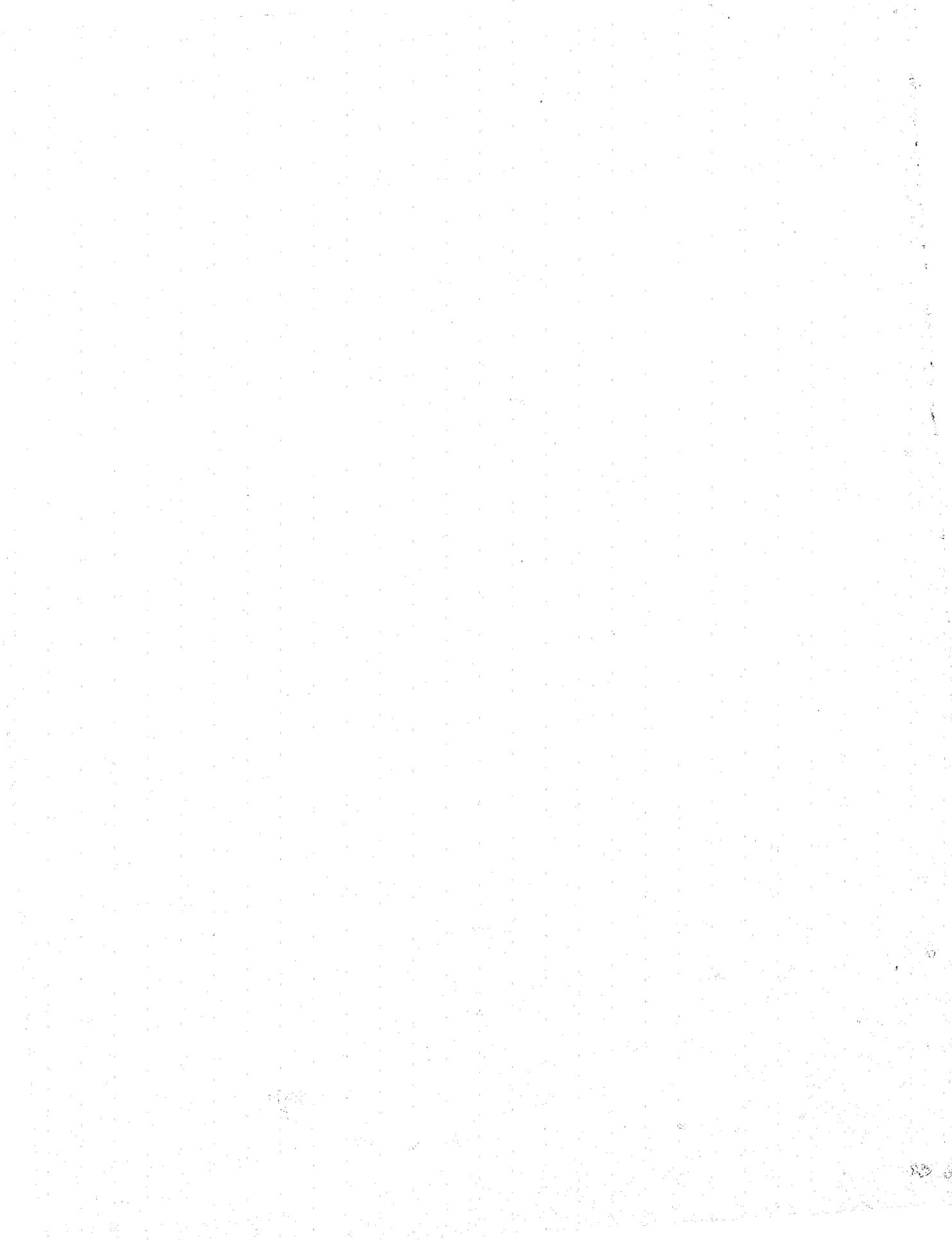


Table 4.2-8

Operation and Regulation of Games if They Become Legal

	OTB		Casinos		Numbers		Sports		Gamblers in General	
	% of Total Sample	% of Sample Answering	% of Total Sample	% of Sample Answering	% of Total Sample	% of Sample Answering	% of Total Sample	% of Sample Answering	% of Non Bettors	% of Non Bettors Answering
Should be operated by										
Government Employees	30	35	28	34	42	65	42	47	24	42
Private Businessmen	55	65	54	66	38	35	47	53	33	58
Non responsive answers	15		18		20		11		43	
Should be regulated by*										
Federal Government	18	18	15	15	19	26	21	22	21	33
State Government	42	43	58	58	34	48	59	61	27	42
Local Government	37	37	17	17	19	26	16	17	15	24
Don't Care	3	2	10	10	--	--	--	--	--	--
Non responsive answers	--	--	--	--	38	--	4	--	37	1

* Responses of lifetime participants only for non-bettor column.

high school sports rises up to the \$15,000 a year level and then declines slightly.

Attitudes Towards Regulation and Operation. If any or all of these games were made legal, the question would arise as to the form of the legalization--who should regulate them and who should operate them. We asked all bettors and non-bettors these questions and the answers clearly indicate that if any game except numbers were legalized, the preferred operator would be private business rather than government. This is especially true for OTB and casino operations. Numbers players say they prefer government supervision to private business. Many people, especially non-bettors did not feel they could answer this question. Regulation by the state instead of either local or federal government is preferred if legalization were to occur. OTB, unlike all other games, has many more proponents of local control but state regulation is preferred even there. (Table 4.2-8)

Anticipated Consequences. There are many pros and cons about legalizing gambling. We asked random sets of bettors about the effects they anticipated if different games were made legal and we asked the total non-bettors about the effects they anticipated if there were legal gambling. They were questioned about four potentially positive and four potentially negative effects. On the positive side a majority of bettors generally agreed that legalization of any of the five games: off-track betting, casinos, lotteries, numbers, and sports, would lead to more jobs for people and increased revenue to finance the government.

The majority of bettors said they did not believe there would be less money for organized crime or more of a chance for the common man to get

rich. There were two exceptions. A majority thought legalizing numbers would lead to less money for organized crime and legalizing lotteries would provide more of a chance for the common man to get rich.

A majority of the non-bettors reported they did not think any of the four positive results would be achieved.

Fewer generalizations can be made across games when we look at the responses to potential negative consequences of legalizing gambling activities.

A majority of bettors feel legalizing OTB and sports betting will result in: more people working less because they are gambling, more of a chance that children will be influenced to gamble, and more people gambling more than they can afford. On the other hand they do not see legalization of off-track betting or sports betting increasing the number of racketeers.

A majority of bettors said they think legal casino betting will lead to more children being influenced to gamble, more racketeers, and more people gambling more than they can afford.

The majority of bettors did not associate any negative consequences with legal lotteries.

A majority of bettors say they fear legalization of numbers will lead to more children being influenced to gamble and more people gambling more than they can afford, but few think people will work less, and less than a majority fear more racketeers will become involved in it.

On the other hand, non-bettors in large numbers fear children will be influenced to gamble, that there will be more people gambling more than

Table 4.2-9

Percent of Respondents in Agreement with Eight Possible Consequences
of Legalizing Each of 5 Different Games

	Random subsets of Bettors					Non
	OTB	Casinos	Lotteries	Numbers	Sports	Bettors Gambling in General
	%	%	%	%	%	%
More jobs for people	71	69	57	64	63	41
A lot more money to run the government	53	66	65	58	67	38
Less money for organized crime	33	45	47	55	27	33
More of a chance for the common man to get rich	49	18	56	30	48	14
More people working less because they are gambling	63	43	13	25	67	57
More of a chance that children will be influenced to gamble	60	66	48	61	53	82
More racketeers connected to it	13	61	31	46	22	71
More people gambling more than they can afford	55	76	42	62	59	81

Table 4.2-10

Beliefs About the Effects of Legalization on Corruption*

	Random subsets of Bettors					Non
	OTB	Casinos	Lotteries	Numbers	Sports	Bettors Gambling in General
	%	%	%	%	%	%
Respect for Law						
More	17	17	19	18	15	13
Less	21	20	7	14	15	38
No Change	57	62	70	64	70	36
Police Corruption						
More	22	26	8	21	26	42
Less	21	16	15	23	23	15
No Change	49	53	71	51	50	27
Political Corruption						
More	36	32	24	30	37	40
Less	11	10	9	18	10	11
No Change	46	51	57	42	47	28

Note: Where responses do not add to 100 percent the remainder is no answer.

they can afford, and more racketeers would be involved. A less sizable majority of them also say if gambling were legal, more people would work less because they are gambling. (Table 4.2-9)

There are three other consequences of legalizing gambling which could not be addressed with an agree or disagree format. We asked respondents if they thought legalizing each game would lead to more, to less, or to no change in respect for law, in police corruption, and in political corruption.

Generally speaking the majority of bettors in the sample said they believe legalizing gambling games will not change how much people respect the law, or the amount of police or political corruption. Non-bettors on the other hand, said there would be less respect for the law and more police and political corruption.

Those bettors who said legalizing gambling would effect a change, more often said the effect would be undesirable in terms of police and political corruption. (Table 4.2-10)

Legal Statutes, Attitudes, and Gambling Behavior. The pattern of gambling statutes varies widely among states, and it is no surprise to find that the more gambling is permitted by a state, the more people are observed to gamble. But gambling is not confined to what is legal, and it is surprising to discover that the extent of illegal gambling is higher in states where more facilities are legal.

Figure 4.2-1 and Table 4.2-11 show this relationship. As we can see, even in states with no legal gambling, 41 percent said they made a

bet of some kind during 1974. Many of these did nothing more than make casual bets with friends, but 24 percent of this population engaged in some kind of legal commercial gambling, and nine percent bet illegally. In states with more legal gambling, we observe not only more commercial legal gambling, but more gambling among friends and more illegal gambling as well.

The correlation of legality with total gambling behavior raises a chicken-egg problem. Are state laws and gambling activity merely different manifestations of the same underlying attitude toward gambling, or do changes in the law themselves modify attitudes and behavior?

Since our survey elicited information on attitudes toward gambling as well as participation, we can attack this question by examining the gambling behavior of a group of people all of whom have the same attitude toward gambling. If we find the same correlation of legality with behavior in such a group, it would tend to support the idea that changes in gambling laws--by altering the social climate surrounding gambling--directly contribute to alteration of behavior.

The measure of attitude toward gambling was obtained by asking each respondent whether each of 13 games should be legalized (if it was illegal) or should be maintained as legal (if it was already legal). The number of responses favorable to legalization was then counted, and taken as an index of how favorable the respondent was toward gambling. The distribution of the scale was given in Table 4.2-1.

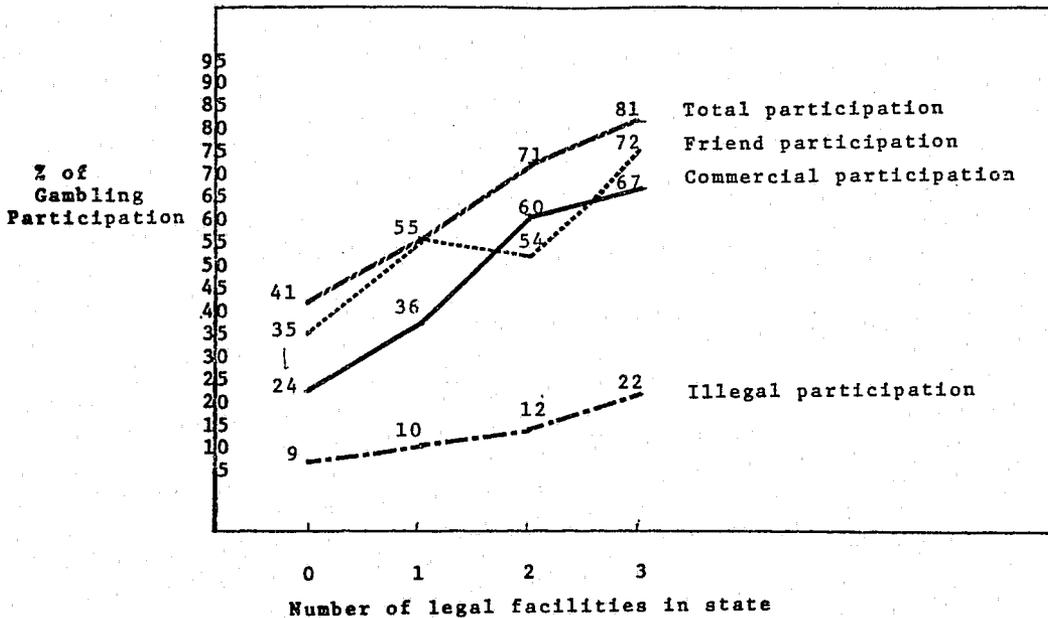
The group of people who indicated a favorable attitude toward legalizing 10 or more of the 13 games were designated as those with the strongest

Table 4.2-11

Gambling Participation by Number of Legal Facilities in State

	Total U.S. %	No Legal Facilities %	One Legal Facility %	Two Legal Facilities %	Three Legal Facilities %
Any Gambling	61	41	58	71	81
Legal Commercial Gambling	<u>44</u>	<u>24</u>	<u>36</u>	<u>60</u>	<u>67</u>
Only	16	13	14	20	7
Combined	84	87	86	80	93
Illegal Gambling	<u>11</u>	<u>9</u>	<u>8</u>	<u>12</u>	<u>22</u>
Only	*	0	*	*	*
Combined	99	100	99	99	99
Friend Gambling	<u>50</u>	<u>35</u>	<u>55</u>	<u>54</u>	<u>72</u>
Only	26	34	20	19	11
Combined	74	66	80	81	89

Figure 4.2-1
Gambling Participation and Legal Gambling Facilities



positive attitude toward gambling. This group was subdivided according to the number of legal gambling facilities available in the states in which they lived and the behavior of each subgroup was examined. Similar treatment was accorded the group of persons who expressed a favorable attitude toward legalizing three or fewer games. The results, plotted in Figure 4.2-2, show a steady rise in gambling behavior in both groups as the extent of legal facilities increase. Although the group with the less favorable attitudes gambles less than those with highly favorable attitudes, the correlation of gambling behavior with legal facilities is clearly marked. Moreover, the same correlation is observed when only illegal gambling is examined (Figure 4.2-3). There is an apparent exception among people well disposed toward gambling who live in states where there are no legal outlets at all. It would appear that when some legal facilities are provided for such people, their illegal gambling declines, but as more and more legal gambling becomes available their total gambling activity--and along with it their illegal gambling--rises. Respondents who are not well disposed toward legalization of gambling also gamble illegally and gamble more where there are more legal facilities, although, again, to a smaller extent than those with more favorable attitudes.

The conclusion appears inescapable that the mere presence of more opportunity to gamble increases the amount of gambling done. Moreover, the greater the total volume of gambling, the more favorable the environment is for illegal operators.

Figure 4.2-3
Illegal Gambling Participation

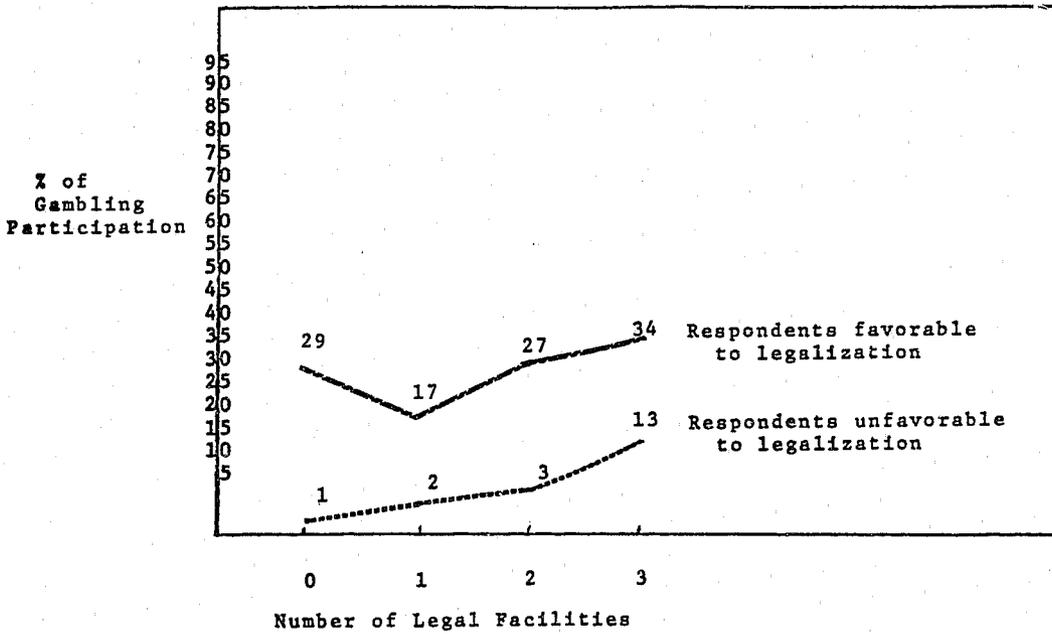
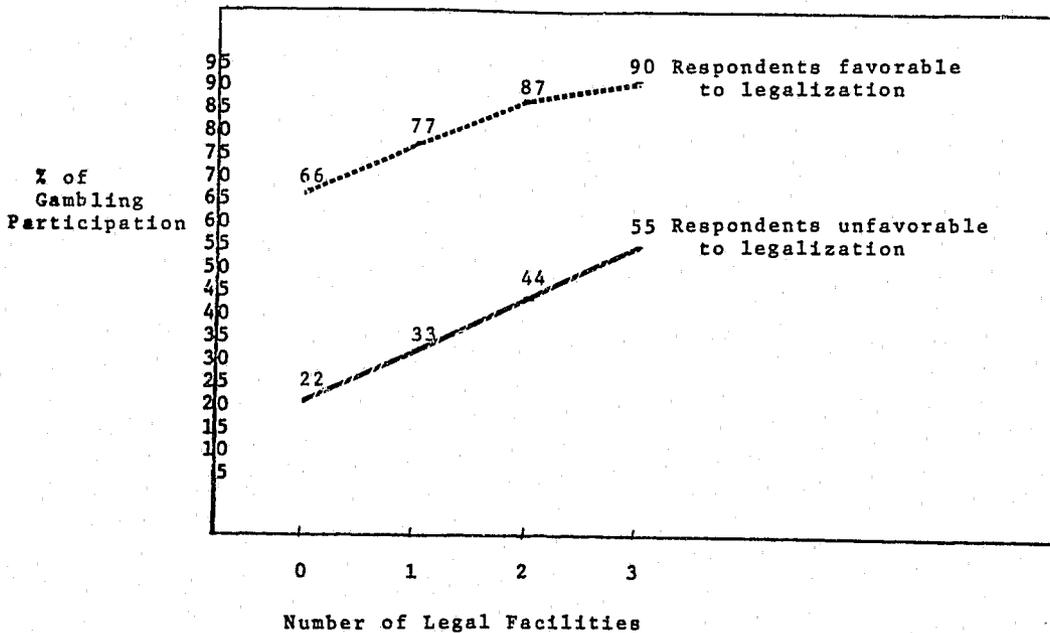


Figure 4.2-2
Any Gambling Participation



4.3 Effect of Legalization on Illegal Gambling

Because of the startling nature of this conclusion and because one of the reasons frequently advanced for legalization is the expectation that legal facilities will discourage illegal operations, we explored the effect of legalization in another way. Observed differences in gambling behavior may be associated with differences in state laws, but they are also associated with differences in income, ethnic background, religious beliefs, and many other factors. If we are to detect the effect of laws, therefore, it is important to control for a large number of other determinants of gambling behavior. For this purpose we employed a multivariate analysis to adjust for the influence of the demographic variables related to gambling behavior.

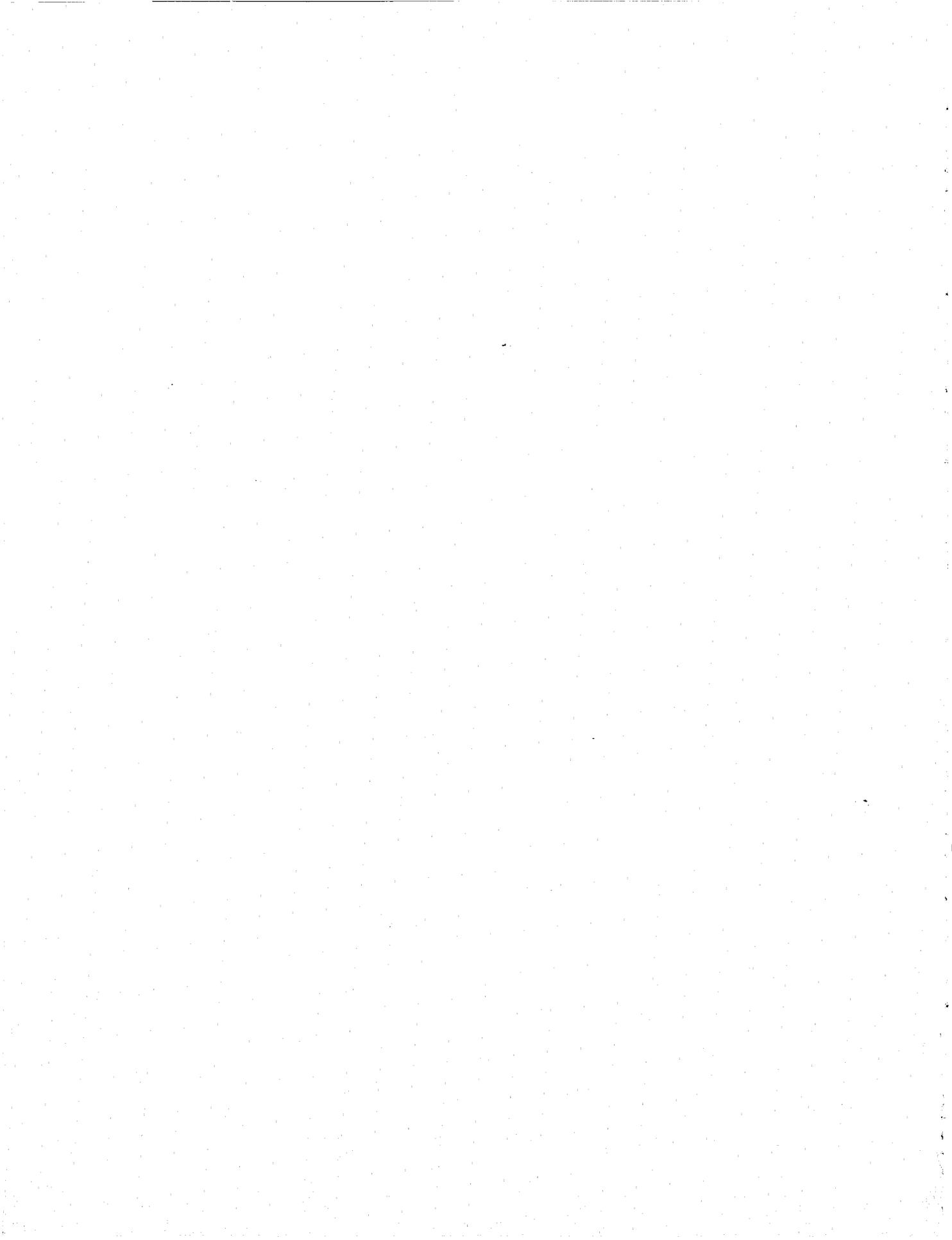
The factors taken into account in the analysis are shown in Table 4.3-1 ranked in order of their importance in contributing to sorting the population into those who participated in illegal gambling and those who did not. As might be expected from general observation, the most important correlate of illegal gambling is sex. Illegal participation is much higher among men than women. Sex is the most important correlate of whether a person gambles with horse books, with sports books, and on sports cards but is seventh in rank in identifying numbers players. For numbers play, the most important identifying characteristic is living near the center of a large metropolitan area. Since numbers are an urban phenomenon, this is hardly a surprising finding.

The second most important characteristic is the region of the country in which a person lives. Region is about equally important in identifying players of individual games.

Table 4.3-1

Rank Order of 13 Variables' Contribution to Whether
People Bet on Four Illegal Activities

Variables	Total Illegal Bettors		Horse Book		Sports Book		Sports Cards		Numbers	
	Rank	Beta	Rank	Beta	Rank	Beta	Rank	Beta	Rank	Beta
Sex	1	.199	1	.125	1	.121	1	.185	7	.066
Region	2	.155	3	.087	2	.102	2	.083	3	.101
Age	3	.126	6	.052	5	.053	3	.081	9	.052
Family income	4	.084	10	.027	3	.058	4	.059	11	.029
Legal lottery	5	.076	12	.025	8	.037	7	.023	10	.049
Distance from 25 largest cities	6	.065	11	.026	11	.018	13	.009	1	.112
Education	7	.063	5	.068	7	.047	9	.017	5	.086
Ethnic background	8	.043	2	.090	6	.051	5	.058	2	.104
Religion	9	.039	9	.029	4	.054	6	.047	8	.062
NY/NJ Metropolitan gambling facilities	10	.039	4	.083	9	.029	11	.015	4	.094
Legal bingo	11	.034	8	.039	13	.004	8	.022	6	.074
Legal horse tracks	12	.018	7	.044	12	.006	10	.017	12	.005
Legal dog tracks	13	.010	13	.013	10	.025	12	.010	13	.002
R ²		.102		.053		.038		.059		.083
F		6.23		3.06		2.17		3.45		4.98



Age of the person ranks third overall, but, except for sports cards, is much less important in identifying participation in individual activities. Family income ranks fourth in overall importance, but is more helpful in identifying people who gamble illegally on anything than in picking out the particular type of illegal gambling.

The fifth overall factor is whether the person lives in a state with a legal lottery. Again, however, this is less useful in identifying participants of a specific type of illegal gambling. Distance from a large metropolitan area is sixth overall, but most important in identifying numbers players. Education is seventh, pretty much across the board.

Ethnic background ranks eighth in ability to distinguish illegal gamblers from others, but is much more important (second for horse books and numbers) in picking out the type of game preferred. Religion is ninth in overall importance, but works somewhat better in identifying sports bettors. The last four ranks are whether the person lives in New York/New Jersey or in the rest of the nation, and whether or not bingo, horse tracks, and dog tracks are legal. Again, the importance of these factors in identifying illegal behavior in general differs from ability to identify players of particular games. For example legality of horse tracks has an important bearing on whether residents of the state bet with illegal horse books, and legality of bingo is important to the question of participation in numbers.

For technical reasons, the cost of calculating coefficients of partial correlation for individual factors is prohibitive in this kind of analysis, but Table 4.3-1 includes beta coefficients that serve as useful approximations. The beta coefficient attached to each factor provides a

basis for appraising its importance in the total explanation of gambling behavior as compared to any other individual factor. Thus, in predicting whether a given person is an illegal gambler, knowledge of income (beta=.199) is over three times as important as knowledge of educational achievement (beta=.063).

Multiple R^2 , indicating the power of the entire set of 13 factors to distinguish illegal gamblers from other people in the population, is given at the foot of the table together with the accompanying F statistic. The .01 level of significance level in this analysis is about $F=1.5$. That F uniformly exceeds this value by a substantial margin attests to the very high statistical significance of the analysis.

Supply of Illegal Gambling. It will be noted that all the factors examined relate to whether individuals participate in illegal gambling or not. But the act of illegal gambling requires not only desire on the part of the consumer (demand) but also the existence of illegal facilities to satisfy that desire (supply). Available evidence from suppliers strongly indicates that both operating costs and risks are much the same everywhere.¹ Hence, a supply is ubiquitous and illegal services appear in response to demand. This means that the results of the analysis can be identified with differentials in demand rather than differences in supply of illegal facilities.

¹The number of persons arrested for gambling offenses, per 100,000 varies substantially. For the 57 cities with populations over 250,000, the rate in 1973 varied from more than 300 per 100,000 to less than one. However, outside of the state of New Jersey, less than one percent of those arrested were incarcerated and fines averaged less than \$100. This suggests that, again with the exception of New Jersey, the illegal gambling operation would be little deterred by law enforcement. This point is treated at length in other studies of the Gambling Commission.

Lotteries. Application of the multivariate procedure can best be illustrated with respect to state lotteries. In the population as a whole, 10.9 percent of adults engage in some form of illegal gambling. When we examine residents of states with legal lotteries, however, we find 13.7 percent gambled illegally (2.8 points above the average) compared to only 8.7 percent (2.2 points below average) in states without lotteries. But the difference in behavior reflects more than merely the presence of the lottery, for residents of the two classes of states differ in a number of other ways that must be taken into account before the influence of the lottery can be observed.

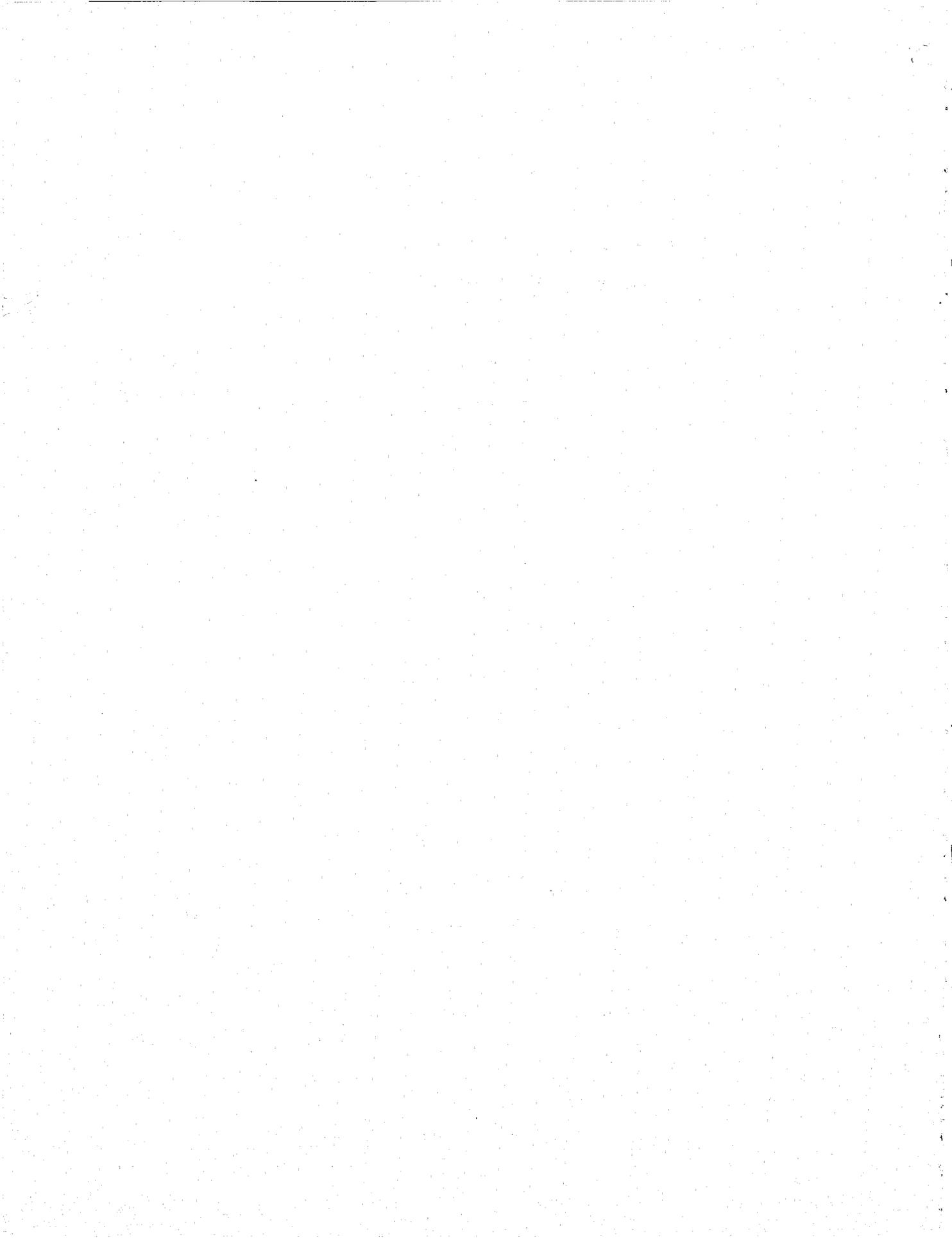
This was done as follows. Illegal betting behavior was first statistically related to observed personal, social, and economic characteristics of each person in the sample. The statistical relationship was then applied to the characteristics of the population of states with legal lotteries to obtain an estimate of illegal betting frequency to be expected there on the basis of personal, social, and economic characteristics alone. The difference between what would be expected and the frequency actually observed was then an estimate of the contribution of the lottery to betting frequency. A similar estimate is made for non-lottery states, and the impact of lotteries was estimated by the swing between the two results.

As Table 4.3-2 shows, after adjusting for these variables the frequency of gambling in lottery states is 2.7 percentage points below what would be expected, given the characteristics of the population, while in non-lottery states we find frequency 2.1 percentage points higher than expected after other characteristics are accounted for.

Table 4.3-2

Effect of Legal Facilities on Illegal Participation

	<u>Any Illegal</u>		<u>Horse Bookie</u>		<u>Sports Bookie</u>		<u>Sports Card</u>		<u>Numbers</u>	
	Dev.	Adj. Dev.	Dev.	Adj. Dev.	Dev.	Adj. Dev.	Dev.	Adj. Dev.	Dev.	Adj. Dev.
Lottery										
No	-2.2	2.1	-1.0	0.3	-0.5	0.4	-0.6	0.4	-2.0	-0.7
Yes	2.8	-2.7	1.2	-0.4	0.6	-0.6	0.7	-0.4	+2.5	0.9
Bingo										
No	-0.7	0.6	0.3	0.7	-0.4	0.1	-0.3	0.4	0.7	1.4
Yes	0.6	-0.5	-0.2	-0.5	0.4	-0.1	0.2	-0.3	-0.6	-1.1
Horses										
No	-1.4	-0.5	-1.3	-1.0	0.5	0.1	0.3	0.4	-1.7	0.1
Yes	0.6	0.2	0.6	0.4	-0.2	-0.1	-0.1	-0.2	0.7	-0.1
Dogs										
No	0.6	-0.1	0.2	0.1	0.3	0.2	0.1	-0.1	0.4	-0.1
Yes	-2.5	0.4	-0.9	-0.4	-1.1	-0.7	-0.6	0.4	-2.0	0.6
New York/New Jersey	10.7	3.2	5.7	3.7	1.0	-1.2	0.9	-0.8	8.7	4.8
Others	-1.2	-3.6	-0.6	-0.4	-0.1	0.1	-0.1	0.1	-0.1	-0.5



In other words, the presence of a state lottery decreases illegal gambling and accounts for a difference of almost five percentage points compared to a situation without a lottery. Since average participation in illegal gambling involves less than 11 percent of the population, this is a substantial swing in behavior. In the unadjusted data, the true effect of the lottery had been completely obscured by the influence of other important factors.

Reading across the table we see that legalization of the lottery tends to reduce the volume of illegal betting as a whole by reducing participation in horse books, sports books, and sports cards. It is interesting to note, however, that after proper adjustment for other factors, the presence of a state lottery appears to encourage, rather than discourage gambling on numbers. Since the two types of gambling are related in form, it may be that the atmosphere created by the existence of the lottery and the accompanying publicity encourages numbers playing as well.

Oddly enough, however, reduction in illegal participation is accompanied by a substantial increase in the number of dollars wagered by those who bet illegally. As shown in Table 4.3-3, after adjustment for other factors the existence of a state lottery raises the average volume of illegal betting above expected levels. This swing represents an increase of \$190 per bettor per year in total illegal wagers, but there are considerable differences among games. After adjustment, wagering with horse books is higher per bettor than expected where there are lotteries. Bets on sports cards are also raised above expectation, although the swing is smaller. Average bets with sports books and on numbers are reduced.

In other words, the impact of lotteries on the average illegal wager tends to offset the effect on participation on horsebooks and sports cards. Some-

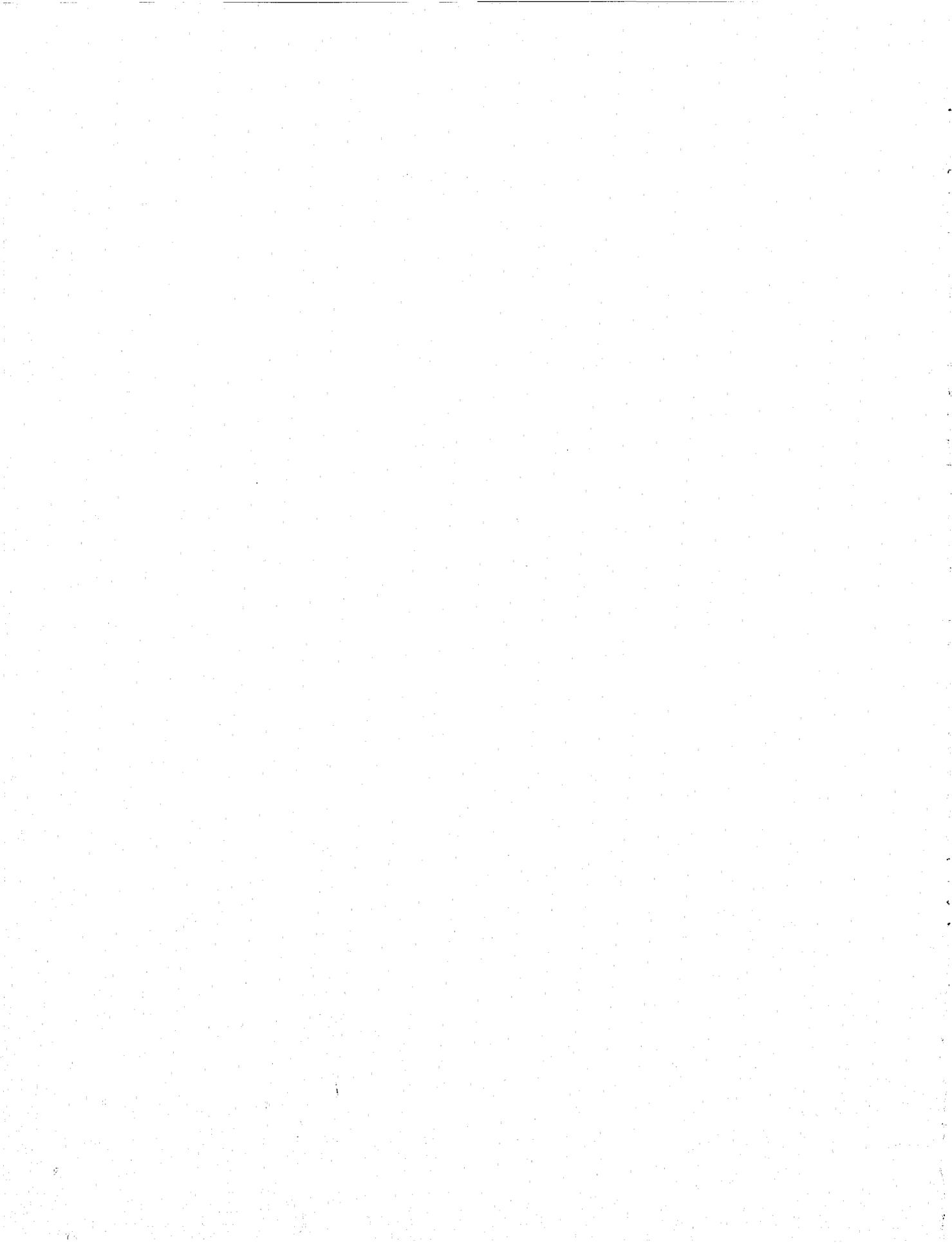
Table 4.3-3

Effect of Legal Facilities on Amounts Bet Illegally

	Amounts Bet									
	Any Illegal		Horse Bookie		Sports Bookie		Sports Card		Numbers	
	(\$275)		(\$417)		(\$621)		(\$44)		(\$273)	
	Dev.	Adj.	Dev.	Adj.	Dev.	Adj.	Dev.	Adj.	Dev.	Adj.
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Lottery										
No	-167	-105	-274	-642	-167	+281	- 21	- 48	-204	+419
Yes	+135	+ 85	+119	+272	+121	-208	+ 18	+ 41	+ 44	- 90
Bingo										
No	+ 48	+153	+ 44	- 58	- 53	+415	+ 22	- 6	+ 68	+ 46
Yes	- 35	-112	- 41	+ 55	+ 28	-220	- 16	+ 5	- 88	- 60
Horses										
No	-156	- 99	-340*	-311*	-219	+110	- 22	- 12	-245*	-951*
Yes	+ 56	+ 35	+ 54	+ 49	+132	- 66	+ 11	+ 6	+ 30	+114
Dogs										
No	+ 11	- 20	+ 27	+ 87**	-103*	-240*	+ 6	+ 4	+ 11*	+ 52*
Yes	- 66	+123	-297*	-416**	+1293*	+3015*	- 32	- 24	-145*	-688*
New York/New Jersey	+278	+109	+ 38	-534	+974	+1441	- 21	- 47	+ 63	-237
Others	- 71	- 28	- 22	+309	-181	-267	+ 3	+ 7	- 43	+161

* Small N

**Adjusted for small sample base.



what fewer bettors on horse books and sports cards are combined with somewhat higher bets per bettor, whereas somewhat larger participation in numbers betting is coupled with smaller bets per customer. These results are reasonable, for it would be expected that the lottery would attract the smaller, more casual player away from illegal gambling, leaving behind a hard core of more devoted, larger-stakes players. By the same token, people attracted to numbers playing by the appearance of a lottery would tend to be the marginal, small-stakes players. The only activity in which both participation and average bet declined is the sports book.

Bingo. As in the case of lottery, illegal gambling participation appeared somewhat greater in states where bingo is legal than where it is not. However, when the characteristics of the population have been adjusted for, the presence of legal bingo is seen to reduce illegal participation: the swing amounting to a reduction of 1.1 percentage points. This reduced participation is found across the board in all forms of illegal gambling, with the greatest reduction--a swing of 2.5 percentage points--found for numbers.

Considering betting as a total, bingo also appears to reduce the average bet per illegal bettor. A substantial part of this consists of the reduction in average wager at sports books.

Horse Tracks. Before adjustment for population characteristics, greater participation on illegal gambling was observed among residents in states that offered paramutuel horse betting than in states that did not, the swing amounting to a 2.0 percentage point increase associated with legal horse tracks. After adjustment for population characteristics, we still find that the existence of parimutuel horse betting contributes to illegal gambling, but the swing is reduced to 0.7 percentage points. Table 4.3-2 shows net reduction in participation in all forms of illegal

gambling except horse books. As would be expected, the greater popular interest in horse racing naturally accompanying existence and advertising of racing and publication of results augments the demand for illegal betting facilities. The magnitude of the increase is more than enough to compensate for reduced participation in other illegal forms of gambling.

Existence of horse racing also appears to increase the average amount wagered illegally per bettor, particularly with horse books and on numbers. (although the latter effect is uncertain because of the small number of people represented).

Dog Races. Unlike all the preceding, legal dog tracks are accompanied by lower illegal gambling participation before any adjustment for population characteristics. After adjustment, however, existence of legal dog racing can be seen to contribute to increased total illegal participation, although the swing is only 0.5 percentage points. In terms of individual games, presence of dog tracks appears to reduce participation in illegal horse books and sports books, but to increase participation in sports cards and numbers.

Average bet per illegal bettor is also increased somewhat, but the entire increase is concentrated in a very large increase in average bet with sports books, based on a very small number of observations.

Multiple Legal Facilities: New York and New Jersey. In addition to inspecting legal facilities one at a time, it is useful to analyze what happens when we examine situations in which a large number of legal facilities are available. New York and New Jersey not only have more legal gambling facilities than any other states except Nevada, they also have forms (OTB in New York, Pickit in New Jersey) that are not found elsewhere. This permits us to apply the same multivariate procedure for exploring the

influence of a large number of facilities together. The procedure was the same as before. That is, the relationship of gambling behavior to personal, social, and economic characteristics was used to estimate expected participation in illegal gambling. Moreover, allowance was made for the availability of lotteries, bingo, and horse and dog tracks. We then examined expected and observed illegal participation for residents of New York and New Jersey and compared the results with similar calculations made for residents of other states.

Before adjustment for population characteristics and for availability of legal facilities, participation in illegal betting was much higher in New York and New Jersey than in other states. Adjustments for characteristics and individual legal facilities show that some part of this difference is still attributable to the combination of a large number of legal facilities in one place because even after adjustment, the differences in illegal betting participation in New York and New Jersey is 6.8 percentage points higher than elsewhere.

The increase occurs in numbers (a swing of 5.3 percentage points) and horse books (4.5 points). Only participation in sports books and cards show small swings in the other direction.

Total illegal wagering per bettor in New York and New Jersey was likewise greater than in the rest of the nation, but this increase is entirely associated with a very large dollar swing by bettors on sports books. After adjustment, the average per bettor bet with illegal horse books, numbers, and on sports cards were lower in New York and New Jersey than elsewhere.

Nevada

The extent to which increased legalization contributes to interest in and social acceptability of gambling, and hence leads to greater participation is well documented by the behavior of Nevada residents. In the state where practically all forms of gambling are both legal and conveniently available, 76 percent of local residents reported participation in one or another form of commercial legal gambling. This compares to 44 percent in the rest of the country. Moreover, the number of dollars wagered per bettor was nearly double the average for the entire United States.

The most popular game with a participation rate of 72.1 percent, was slot machines. 54.2 percent reported playing keno, and 27.3 percent participated in casino table games. Even the ubiquitous bingo was more popular in Nevada (24.1 percent) than in the United States as a whole (18.7 percent).

Although frequency of participation in illegal gambling was a third of that of the United States as a whole (4 percent compared to 11), it was by no means absent. Indeed 2.9 percent reported participation in illegal sports books--more than the 1.9 percent rate for the United States as a whole. This was despite the existence of legal sports-betting parlors patronized by 8.1 percent of adults. Existence of this illegal activity in the face of the legal substitute was presumably attributable to the 10 percent federal excise tax then in force on legal betting of this kind.

The response to the legal environment is further exemplified by the relatively low popularity of betting on horses. Only 6 percent of Nevadans, compared to 8 percent of New Yorkers, patronized off-track horse parlors

and only 1.9 percent of Nevadans compared to 2.4 percent of Americans at large, patronized an illegal horse book during 1974. These low participation rates are doubtless associated with the absence of thoroughbred racing in Nevada and the attendant low interest in the activity.

In short, Nevada is a prime example of the dynamic influence of legalization of gambling on social behavior. It has a current commercial participation rate nearly double that of the rest of the country, nearly twice as many dollars are ventured per bettor, and gambling involves nearly four times as many dollars wagered per capita in Nevada as in the United States as a whole.



CHAPTER FIVE

BETTING ON HORSES

5.1 Participation

Betting on horse races is the most widespread form of legalized gambling in the United States, although not the most popular. In 1974, betting on horse races in one form or another was legal in 30 states, and in those states, 16 percent of the sample reported placing a bet at the track. This compares with eight and one half percent who live in states where dog racing is legal and placed bets at dog tracks, and 48 percent who live in states with legal lotteries and purchased lottery tickets.

Of the total population 18 years old and above which was sampled, 35 percent reported having bet at the racetrack in their lifetime. Fourteen percent, which projects to 20.2 million people, said they placed a bet at the track in 1974, yielding a total handle in 1974 of 7.9 billion dollars. The official track figure for the 1974 handle is 7.5 billion dollars, indicating that the interview data figure is within five and one-third percent. The average take-out rate at horse tracks is 16.6 percent, which means that adult Americans spent (i.e., lost) about 1.25 billion dollars betting on horses at the track in 1974.

About seven and one-half percent of the sample placed an illegal bet on the horses with a bookie sometime in their life, while about two and one-half percent, or 3.6 million people, did so in 1974. The total volume of horse bets with bookies was about 1.4 billion dollars in 1974. The take-out

rate for bookie bets on horses is, on the average, 17 percent, indicating a total of about 227 million dollars spent (i.e., lost) by Americans in 1974 on horse bets with bookies.

Nine percent of the public reported betting at a track in their own state in 1974. The average in-state track attendance for these people was eight days in the year. In addition, six percent of the sample said they went to an out-of-state track in 1974. The average number of days at out-of-state tracks for these people was four days. Overall, fourteen percent reported going to a track either in their own state or in another state in 1974. The average track attendance during 1974 for people who went to the track within their own state or another or both was seven days.

People who bet on the horses with bookies, on the other hand, placed a bet with a bookie an average of 28 different days in 1974. This is similar to the average of 27 days bet at New York's legal OTB system in 1974 by bettors who patronize that facility. It thus appears that the institution of a legal off-track betting system results in a frequency of horse betting which is quite similar to the frequency of betting with the illegal horse book operations.

5.2 Who Bets on Horse Races?

Men reported betting at the track to a somewhat greater extent than women, but over five times as many men as women said they placed an illegal bet on the horses in 1974. Horse betting, both legal and illegal, was reported by a greater proportion of the non-white than the white population. This stands in contrast to sports betting where just the reverse is true.

People with Italian and Spanish speaking backgrounds report betting on horses both legally and illegally in 1974 more than those from other backgrounds. Those of East European and African backgrounds bet at the track more than average but did not report above average illegal betting. As income increases there is a fairly steady increase in the percentage of people who report betting at the track or with a bookie.

Generally speaking there is a steady decline in the percent of the population reporting illegal bets on horses as age increases, but legal betting on horses increases from the lowest age groups to the 25-44 year old group, then declines. People 65 years old or over, as in other forms of betting, participate to a markedly lesser extent. This relationship is in all probability due to the reduced financial resources of most older respondents.

As with most other forms of betting, single people who are not widowed show a much higher participation rate in legal horse betting than is found in any other marital status group. In illegal betting on horses, only those who are divorced or separated show above average participation.

Betting at the track is more of a suburban phenomenon while illegal horse betting is somewhat more of an urban phenomenon. Legal horse betting is far less prevalent in areas 50 miles or more distant from the 25 largest cities in the United States.

Those of the Jewish faith report betting at the track far more than any other religious group. Catholics place a proportionately higher number of illegal bets, but are followed closely by Jews in this respect. Many fewer of those who embrace the Protestant faiths and those who say they are

Table 5.2-1

1974 Legal and Illegal Betting on Horses
by Demographic Variables

	1974 Horseracing Bets	
	Legal %	Illegal %
<u>TOTAL</u>	14	2
<u>Sex</u>		
Man	16	4
Women	12	1
<u>Race</u>		
White	13	2
Non-white	17	4
<u>Region</u>		
Northeast	21	6
West	16	1
North Central	12	2
South	9	1
<u>Ethnic Background</u>		
Italian	25	10
Spanish speaking	22	5
East European	22	2
African	18	2
West European	13	2
British	12	1
Irish	11	1
Other	10	3
<u>Education</u>		
Less than high school	8	2
High School graduate	16	4
Some college	14	2
College graduate	23	1
<u>Age</u>		
18-24 years	15	3
25-44 years	18	3
45-64 years	13	2
65 and over	3	1
<u>Marital Status</u>		
Divorced/separated	27	6
Never married	17	2
Married	13	2
Widowed	4	0
<u>Distance from Largest 25 Cities</u>		
24 miles or less	18	3
25-49 Miles	22	2
50 Miles or More	10	2
<u>Religious Preference</u>		
Jewish	31	3
Catholic and Orthodox	20	4
All Protestant combined	11	2
Protestant bible oriented sects	7	2
Atheist, agnostic, or no preference	12	0
<u>Income</u>		
Less than \$5,000	6	1
\$5,000-\$10,000	12	2
\$10,000-15,000	10	3
\$15,000 and over	19	3

atheists, agnostics, or have no religious preference bet on the horses. The Protestant Bible-oriented sects reported betting on horses at the track the least. With respect to illegal betting on horses, the Protestant Bible-oriented sects and all Protestants combined were almost equally represented while atheists, agnostics, and those with no preference had virtually a zero participation rate.

The least amount of legal and illegal horse betting is reported by those with the least education. The percentages climb among respondents who have received a high school education and drop slightly among those who have had some college. The percentage continues to drop for illegal betting among college graduates, but college graduates, on the other hand, show the highest proportion of legal horse betting. (Table 5.2-1)

A question our survey set out to answer is whether the percent of family income spent on horse race bets is higher for the lower income groups. That is, does the take-out from legalized horse racing constitute a "regressive tax" and would the take-out from legalized OTB be regressive?

The taxes on legal horse track betting are regressive. People with lower incomes are spending a greater proportion of their income than people of higher incomes. Although there appears to be a slight dip at \$10,000 to \$15,000 annual income, it does not change the finding of regressivity. Exactly the same pattern is found for betting with horse books. If we look at OTB in New York City, the heaviest tax burden is placed on the below \$10,000 income bracket but above \$10,000 it begins to look like a progressive tax. (Table 5.2-2)

Table 5.2-2
 Mean Percent of Family Income Bet
 on Horse Races in 1974

	Mean Percent of Family Income Spent in 1974		
	Legally %	Illegally %	New York OTB %
<u>Family Income</u>			
Total Sample	0.50	0.06	1.15
Less than \$5,000	0.63	0.09	} 3.03
\$5,000-\$10,000	0.61	0.24	
\$10,000-\$15,000	0.35	0.07	0.41
\$15,000-\$20,000	0.57	0.03	0.87
\$20,000-\$30,000	0.25	0.05	} 1.15
\$30,000 and over	0.22	0.05	

5.3 Leisure Time Use and Betting on Horses

Horse bettors, like other bettors and unlike non-bettors, spend less time on home and church related activities and more time on outdoors and sports activities. Horse bettors also spend more time on community activities, drink alcoholic beverages more frequently, and go to bars and night-clubs more often. One aspect of leisure time use which differentiates horse bettors from sports and numbers bettors is the tendency for horse bettors to attend lectures, the opera, or go to museums more frequently and to spend more time on arts and crafts. As is the case with sports and numbers bettors, horse bettors spend more money on recreation and vacations than non-bettors and the total betting population. (Tables 5.3-1 to 5.3-3)

5.4 Betting on Horses and Other Betting

Those who bet legally on horse races in 1974 also report betting more on other legal activities than both the total population and the bettor population. Over half of those who bet at the tracks in 1974 said they also bet on sports with friends, over forty percent bought lottery tickets, and over a third played bingo for money. A quarter of those who bet at the tracks in 1974 also bet at casinos, and about 13 percent also bet on dog races. Betting on dog races has the lowest level of participation of any other form of legal gambling by horse bettors. This might suggest that horse and dog tracks will not compete for any sizable proportion of the same clientele. (Table 5.4-1)

A greater percentage of those who bet legally on the horses in 1974 bet on illegal games than did the total population. The percentage of those who placed illegal bets on the horses and also placed other illegal

Table 5.3-1

Patterns of Leisure Time Use and Betting on Horses

	Mean Number of Days in 1974			
	Total Sample	1974 Non-Bettors	1974 Horse Bettors Legal Illegal	
Watch television	213	215	209	226
Read newspapers or magazines	209	181	241	237
Nap/daydream	106	115	110	88
Read books	93	92	116	100
Home improvements/gardening	84	92	74	69
Socialize with friends and relatives	84	81	86	86
Church activities	57	78	39	30
Knitting/sewing, etc.	46	59	28	11
Drink alcoholic beverages (except with meals)	44	17	71	110
Active non-team sports	27	13	40	39
Fishing, hunting, camping, etc.	25	18	27	29
Arts and crafts	21	18	23	38
Attend sports events	19	13	26	31
Active team sports	18	9	33	40
Nightclubs, bars, dancing	18	6	35	57
Community activities	17	15	21	34
Movies or theatre	13	8	21	18
Opera, lectures, museums	7	6	9	12

bets in 1974 is greater than the percentage among the total population, the bettor population, and those who placed any other type of illegal bet in 1974. These results provide further evidence that horse bettors tend to be the action seekers in the population. They report betting proportionately more on all forms of gambling, legal and illegal, than do other groups. (Table 5.4-2)

5.5 Exposure to Betting on Horses

The data from this study provide strong evidence that exposure to others betting on the horses, whether as a child or an adult, increases the likelihood that one will engage in betting on the horses. This statement holds for both legal and illegal betting. Over twice as many people who bet legally on the horses in 1974 said that as children they had known "quite a lot of" people who bet on the horses than was the case in the total sample. When the 1974 track bettors are compared to non-bettors, this ratio increases to about ten to one. These differences are practically twice as large when those who placed illegal bets on the horses in 1974 are compared to the total sample or to non-bettors. The same trends exist when the question was how many people the respondents now know who bet legally on the horses. Although the ratios are not quite as large in the latter case, the percentages increase dramatically. (Tables 5.5-1 and 2)

The differential betting prevalence by level of exposure to illegal betting on the horses as a child or as an adult is sufficiently great to indicate that widespread availability of horse betting will probably

Table 5.3-2

Recreation Expenditures and Betting on Horses

Average dollars spent per week on recreation in 1974	Total Sample %	1974 Non Bettors %	1974 Horse Bettors	
			Legal %	Illegal %
Less than \$5	31	53	13	13
\$5-\$9	20	16	14	19
\$10-\$14	15	13	18	14
\$15-\$24	17	12	23	12
\$25 and over	17	6	32	42

Table 5.3-3

Vacation Expenditures and Betting on Horses

Average dollars spent on vacations in 1974	Total Sample %	Non Bettors %	1974 Horse Bettors	
			Legal %	Illegal %
No vacation	23	36	8	18
Spent nothing	2	2	2	0
Under \$100	15	20	10	6
\$100-\$299	17	14	14	13
\$300-\$499	14	10	15	15
\$500-\$749	11	7	17	13
\$750 and over	18	11	34	35
Mean vacation days, 1974	18 days	15 days	20 days	21 days

Table 5.4-1

Betting on Horses and Other Forms of Legal Gambling

Gambling Activity	Total Sample %	1974 Bettor Sample %	1974 Legal Horse Bettors %
Sports with friends	28	46	50
Lotteries	24	40	43
Bingo	19	31	37
Casinos	10	16	26
Dog races	4	6	13

Table 5.4-2

Betting on Horses and Illegal Betting

Gambling Activity	Total Sample %	1974 Bettors %	All 1974 Illegal Bettors %	Horse Bettors	
				1974 Legal %	1974 Illegal %
Any illegal outlet	11	18	100	30	100
Illegal sports bets	4	6	36	12	45
Numbers	3	5	28	10	44

Table 5.5-1

Exposure to Legal Betting on Horses
and Extent of 1974 Horse Betting

	Total Sample %	Non Bettors %	1974 Horse Betting	
			Legal %	Illegal %
<u>People known as a child who bet legally on horses</u>				
Most people/quite a lot	13	4	29	49
A few/practically nobody	87	96	71	51
No answer	0	0	0	0
<u>People known now who bet legally on horses</u>				
Most people/quite a lot	26	11	59	84
A few/practically nobody	73	89	40	16
No answer	1	0	1	0

Table 5.5-2

Exposure to Illegal Betting on Horses
and Extent of 1974 Horse Betting

	Total Sample %	Non Bettors %	1974 Horse Betting	
			Legal %	Illegal %
<u>People known as a child who bet illegally on horses</u>				
Most people/quite a lot	6	3	14	37
A few/practically nobody	93	97	76	62
No answer	1	0	0	1
<u>People known now who bet illegally on horses</u>				
Most people/quite a lot	12	6	24	67
A few/practically nobody	87	93	75	32
No answer	1	1	1	1

result in increased betting. If this premise is accepted, a moment's reflection reveals the probable circularity of events and possible extremely rapid increase of betting prevalence up to certain limiting conditions. Availability provides exposure, which results in increasing prevalence of betting, which in turn results in increasing numbers of people exposed to betting. Granted, the phenomenon involved is more complex. Some people are exposed and never bet, economic fluctuations have an effect, etc. However, if this simplistic model serves to explain betting behavior to any appreciable extent, it is a marketer's dream come true. All that is necessary is to make the product widely available, advertise a bit, and business will increase at a rapid pace. Whether such an outcome is desirable is a policy issue rather than a research question.

A related question is whether widespread availability of, and consequent exposure to, legal horse betting is related to the amount of money people bet illegally. One argument is that the legal system competes successfully with the illegal system, depriving the illegal operators of revenue and consequently reducing corruption. A counter-argument is that a legal system cannot compete successfully with an illegal system due to the higher overhead and other expenses incurred by a legal system. Legalization, according to this argument, merely attracts a new market, leaving the old market with the illegal system, and perhaps increases the illegal business by introducing the new customers to a product they can buy more cheaply on the illegal market. Table 5.5-3 provides some evidence bearing on this issue. Forty-five percent of the heavy illegal bettors in 1974 had, as children, been exposed to quite a lot of people who gambled at

Table 5.5-3

Illegal Betting Volume as Related to Exposure
to Legal Horse Betting

	No Illegal Bets %	1974 Illegal Betting Volume	
		\$1-\$50 per year %	Over \$50 per year %
<u>People known as a child who bet legally on horses</u>			
Most people/quite a lot	11	21	45
A few/practically nobody	94	79	55
No answer	1	0	0
<u>People known now who bet legally on horses</u>			
Most people/quite a lot	23	54	77
A few/practically nobody	90	45	23
No answer	1	1	0
<u>People known as a child who bet illegally on horses</u>			
Most people/quite a lot	5	17	30
A few/practically nobody	89	83	69
No answer	0	0	1
<u>People known now who bet illegally on horses</u>			
Most people/quite a lot	9	26	50
A few/practically nobody	87	73	47
No answer	1	1	3

horse tracks and 77 percent currently know quite a lot of people who do so. This compares to 21 percent and eleven percent reported childhood exposure levels for light illegal gamblers and people who don't gamble illegally respectively, and 54 and 23 percent reported current exposure levels. The same general trend occurs for those who were exposed to illegal betting on the horses. The results indicate that exposure as a youngster or as an adult to people who bet, legally or illegally, on the horses is related to both the prevalence of betting on the horses and the amount bet.

5.6 Legalization of Gambling and Betting on the Horses

Another line of evidence bearing on the issue is the prevalence of illegal horse betting in states where there are tracks versus where there are no tracks. Track betting is now legal in 30 states, and the total 1974 handle from track records was 7.5 billion dollars. If those tracks didn't exist, the legal handle, obviously, would have been zero but so would the illegal handle for horses which depends on the tracks for its existence. Nevertheless, as the situation stood in 1974 there were some states with and some without legal tracks, and technically illegal books do not require a track in the same state for their operation.

In Table 5.6 we see that a sizable proportion of people go to the tracks even when they are not available locally. In fact, 20 percent of the total track attendees in 1974 lived in states where there are no legal tracks. In addition we can see that illegal books are operating in states without tracks. One percent of our sample living in those states report they bet with a horse book. This compares to three percent who bet with

Table 5.6

1974 Betting on Horses by State Laws Regulating Track Operations

	Total Sample %	Legal Track State %	Track Not Legal %
Bet at track	14	16	9
Bet with horse book	2	3	1
Bet illegally			
Light bettor (under \$50 per year)	4	4	4
Heavy bettor (over \$50 per year)	3	3	2

Table 5.7-1

Legal Horse Bettors' Perceptions of Betting
on Horses as Luck or Skill

	Track Betting %	Bookie Betting %
Almost all luck/more luck than skill	48	44
Equal amounts of luck and skill	32	32
Almost all skill/more skill than luck	20	19
Don't know	0	5

a horse book who live in states with a track, suggesting that while a local track is not necessary for an illegal horse operation, it does stimulate betting on the horses with a bookie. And while heavy illegal bettors are found in both sets of states, there are more of them in states with tracks.

5.7 Luck and Skill

Among other attitudes towards and perceptions of betting activities, respondents were asked how much luck or skill they thought was involved in each activity. All games were rated along a five-point scale from "almost all luck" to "almost all skill." A greater percentage of the respondents who did not bet with bookies said they didn't know how much luck or skill was involved in betting with bookies, and a greater percentage of respondents who bet with bookies rated both betting on horses at the track and with bookies as requiring more skill than luck. It is possible that those who engage in illegal betting actually are better handicappers and recognize the skill factor to a greater extent than those who utilize the legal system. Or, it may be that the illegal bettors are deluding themselves to a greater extent and the illusion of control is a factor in their involvement in betting. In any event, about half of both bettor groups--track bettors and bookie bettors--perceive betting on horses as involving more luck than skill and are willing to take the chance. (Tables 5.7-1 and 5.7-2)

5.8 Perception of "Fixed" Races

The respondents were also asked to rate the frequency with which, in their opinion, horse races were "fixed." The mean ratings given by the total sample, the non-bettors, the 1974 bettors on horses at the track,

Table 5.7-2

Illegal Horse Bettors' Perceptions of Betting
on Horses as Luck or Skill

	Legal Betting %	Bookie Betting %
Almost all luck/more luck than skill	49	49
Equal amounts of luck and skill	26	26
Almost all skill/more skill than luck	25	25

Table 5.8

Mean Ratings of How Often Races are Fixed*

	Total Sample	Non Bettors	1974 Track Bettors	1974 Bookie Bettors
Mean	2.89	2.69	2.94	2.98

* Scale: 1 = Fixed most of the time; 2 = Fixed pretty often; 3 = Fixed sometimes; 4 = Almost never fixed; 5 = Never fixed.

and those who bet on the horses with bookies in 1974 are given in Table 5.8. The mean ratings for all groups fall between "fixed sometimes" and "fixed pretty often." Although the differences are not large, bettors tend to have more faith in the system than non-bettors. The fact remains, however, that almost half of the bettors regard betting on horses as mostly luck, they perceive the probability of at least an occasional fix, and still they bet.

5.9 Convenience and Availability

One factor which could reasonably be expected to influence betting is the convenience and availability of betting facilities. This is clearly the case with respect to betting at horse tracks. More than twice as many respondents who did not place a bet at the track in 1974 as those who did bet, reported there was no track in the area. Once there is a track in the area, however, the proximity of the track and the availability of public transportation to the track seem to have only a minor influence on track attendance. Ten percent more bettors than non-bettors report a track is only a short ride from where they live. The primary difference between bettors and non-bettors with respect to public transportation to the track is that a greater percentage of the non-bettors don't know whether public transportation is available. Presumably, being non-bettors, it is not important to them to find out whether or not it is available. (Table 5.9-1)

When one examines these data in another way the importance of availability and convenience, but not public transportation to the tracks is

Table 5.9-1

Convenience and Availability of Horse Tracks

	<u>1974 Track Betting</u>	
	<u>Bettors</u>	<u>Non-bettors</u>
	<u>%</u>	<u>%</u>
Track in area	84	58
No track in area	15	36
Don't know	<u>1</u>	<u>6</u>
	100	100
Public transportation to track available	52	53
No public transportation to track available	43	34
Don't know	4	13
No answer	<u>1</u>	<u>0</u>
	100	100
Track in walking distance	2	4
Short ride to track	59	48
Long ride to track	39	45
Don't know	<u>0</u>	<u>3</u>
	100	100

underlined. Not surprisingly, comparing those who live in an area where a track is available to those who do not, more than two and one half times the proportion of the first group placed a bet. Comparing those who live within a short drive to those for whom the trip to the track is a long drive, seven percent more of those living within a short drive bet at the track. A slightly greater proportion of those who reported that no public transportation to the track was available bet than those who said public transportation was available. This result is most likely due to the fact that there is a higher incidence of betting on horses among the more affluent, who do not depend on public transportation. (Table 5.9-2)

The more urbanized the area the greater the availability of racetracks. Almost 80 percent of those in the most urbanized areas report that there is a track in the area, compared to under 60 percent of those in the least urbanized areas. Public transportation to the track is also more available in the urbanized areas, and the people living in the least urbanized areas have to travel farther to get to a track when one is available. (Table 5.9-3)

Tracks are also more available in the Northeastern and the Western regions of the United States than in the North Central or the South, and the tracks in the North Central region are somewhat more inconvenient to get to when they are available. The convenience of the tracks is directly reflected in betting participation by region. Betting on horses at the track is highest in the Northeast, followed by the West, North Central, and South, and is lowest in the least urbanized areas. (Table 5.9-4)

Table 5.9-2

Betting Prevalence and Availability of Tracks

	<u>Track in Area</u>	<u>No Track in Area</u>
Bet on horses at the track in 1974	26	10
Did not bet on horses at the track in 1974	74	90

	<u>Track In Area</u>			
	<u>Track in Walking Distance</u>	<u>Short Ride To Track</u>	<u>Long Ride To Track</u>	<u>Don't Know</u>
Bet on horses at the track in 1974	23	30	23	0
Did not bet on horses at the track in 1974	77	70	77	100

	<u>Track In Area</u>		
	<u>Public Transportation to Track Available</u>		
	<u>Yes</u>	<u>No</u>	<u>Don't Know</u>
Bet on Horses at the track in 1974	26	29	15
Did not bet on horses at the track in 1974	74	71	85

Table 5.9-3

Availability of Tracks by Urbanicity
and Geographic Region

	Total Better Sample %	Distance from 25 Largest Cities		
		Less than 25 miles %	25-49 miles %	50 miles or more %
Track in area	67	78	69	58
No track in area	30	19	30	38
Don't know	<u>3</u>	<u>3</u>	<u>1</u>	<u>4</u>
	100	100	100	100
Public transportation to track available	53	68	50	39
No public transportation to track available	38	22	46	51
Don't know	<u>9</u>	<u>10</u>	<u>4</u>	<u>10</u>
	100	100	100	100
Track in walking distance	3	3	2	2
Short ride to track	51	56	56	45
Long ride to track	45	39	40	52
Don't know	<u>1</u>	<u>2</u>	<u>2</u>	<u>1</u>
	100	100	100	100
Percent betting at track	14	18	22	10

Table 5.9-4

Availability of Tracks by Geographic Region

	Total Bettor Sample %	Northeast %	North Central %	South %	West %
Track in area	67	78	60	52	76
No track in area	30	19	37	44	22
Don't know	<u>3</u> 100	<u>3</u> 100	<u>3</u> 100	<u>4</u> 100	<u>2</u> 100
Public transportation to track available	53	53	39	50	71
No public transportation to track available	38	38	52	40	20
Don't know	<u>9</u> 100	<u>9</u> 100	<u>9</u> 100	<u>10</u> 100	<u>9</u> 100
Track in walking distance	3	2	2	2	4
Short ride to track	51	54	40	54	58
Long ride to track	45	42	56	44	36
Don't know	<u>1</u> 100	<u>2</u> 100	<u>2</u> 100	<u>0</u> 100	<u>2</u> 100
Percent betting at track	14	21	12	9	16

Illegal horse betting is also related to the convenience of placing a bet and according to our data placing an illegal bet is convenient. Eighty-four percent of those who placed an illegal horse bet in 1974 said the bet could be placed by phone. This compares to 55 percent reported phone availability by respondents who did not place a bet in 1974. Over three-fourths of those who placed an illegal bet in 1974 said the bets could be placed where they worked or lived, and 62 percent said they could place an illegal horse bet near where they worked or lived. Only 15 percent of those who did not place a bet in 1974 reported that they could place an illegal horse bet at or near their job or residence. (Table 5.9-5)

The convenience of betting on the horses illegally seems to be almost as great in the less urban areas as in the more urbanized areas. A lower proportion in the non-urban areas report that bets can be placed at or near their residence or place of employment, but practically the same proportion claims to be able to place a bet by phone or in a convenient location as in the more urban areas.

The region of the country one lives in is apparently a more dominant factor in whether illegal facilities are convenient. The Northeast has the greatest proportion of people claiming to be able to place a bet by phone or at or near their residence or place of work and the smallest percentage claiming it is impossible to place an illegal bet on the horses. The North Central region is second in providing convenient illegal betting facilities followed by the South and West, in that order. Again we observe that betting participation rates follow convenience. (Table 5.9-6)

Table 5.9-5

Convenience and Availability of Illegal Horse Betting*

How Illegal Horse Bets Can be Placed	1974 Illegal Horse Bettors %	1974 Non Bettors %	1974 Bettors %
By phone	84	55	58
Where they work or live	78	15	32
Near where they work or live	62	13	31
Somewhere else easy to get to	48	12	25
Somewhere else hard to get to	31	4	12
Can't be done in area	5	11	15
Don't know	4	32	20

* Note: Columns do not add to 100 percent due to multiple responses.

Table 5.9-6

Convenience and Availability of Illegal Horse Betting
by Urbanicity and Geographic Region*

How Illegal horse bets Can be Placed	Total Bettor Sample %	Distance from 25 Largest Cities		
		Less than 25 Miles %	25-49 Miles %	50 Miles or More %
By phone	58	58	59	57
Where they work or live	30	30	35	29
Near where they work or live	29	32	35	25
Somewhere else easy to get	24	24	23	23
Somewhere else hard to get	11	13	15	8
Can't be done in area	15	14	18	15
Don't know	21	21	18	22

		Geographic Region			
		Northeast %	North Central %	South %	West %
By phone	58	61	59	55	46
Where they work or live	30	44	35	20	17
Near where they work or live	29	46	24	24	18
Somewhere else easy to get	24	35	19	22	17
Somewhere else hard to get	11	18	8	8	8
Can't be done in area	15	8	15	17	22
Don't know	21	17	20	24	27
Betting with a horse book	2	6	2	1	1

* Note: Columns do not add to 100 percent due to multiple responses.

5.10 Off-track Betting in New York

In view of the fact that off-track betting on horses is legal in New York, a supplemental sample was drawn from the greater New York City area to enable a more detailed analysis of the use of off-track betting facilities in the area. Eighteen percent of the New York respondents (28% of N.Y. bettors) reported betting with OTB at some time and 13.5 percent said they bet with OTB in 1974 (21% of N.Y. bettors). Those who bet reported betting an average of 28 days in that year. This compares with only six percent of the Nevada sample who bet with OTB an average of seven days. (Table 5.10-1) The Nevada respondents, however, have a variety of other legal betting opportunities and no tracks in the state.

The New York respondents who bet at OTB in 1974 report betting an average of two races a day and eight dollars per race. In general, the pattern of OTB betting is more similar to betting with a bookie than to betting at the track. With OTB and bookies, bettors place bets more days per year, bet fewer races per session, and place higher bets on the races on which they bet.

Of the respondents who bet with OTB in 1974, 38 percent said they realized a net profit and 57 percent reported losing. Five percent said they broke even. The average reported winning among those who won was 94 dollars, and the average reported loss among losers was 288 dollars. (Table 5.10-2)

The projected total amount bet on OTB in 1974 based on the responses of the New York City respondents was 967 million dollars, which compares with the official figure of 814 million dollars.

Table 5.10-1

OTB Use: New York and Nevada

	Total New York Bettors %	N.Y. Lifetime Bettors %	Nevada Bettors %
Ever bet OTB	18	28	n.a.
Never bet OTB	<u>82</u> 100	<u>72</u> 100	n.a.
Bet OTB-1974	13.5	21	6
Did not bet OTB-1974	<u>86.5</u> 100	<u>79</u> 100	<u>94</u> 100
Mean number of days bet at OTB in 1974 (Among those who used OTB)	28 days		7 days

Table 5.10-2

Reported Wins and Losses at OTB (N.Y.)

	1974 OTB Bettors %
Won	38
Lost	57
Broke even	<u>5</u> 100
Mean amount won (winners only)	\$94
Mean amount lost (losers only)	\$288

5.11 Needs

The rationale on which the concept of needs and need fulfillment, or the extent to which there is a discrepancy between how much a person has and how much he wants, is discussed in Chapter Nine. Table 5.11 presents the means, on a scale from one (low need) to eight (high need) for the total sample, the lifetime non-bettors, those who bet on horses at the track in 1974, and those who bet on the horses with bookies in 1974. 1974 track bettors expressed a higher need for all of the things they were asked to rate than non-bettors. Respondents who bet on the horses illegally in 1974 also rated their needs as greater than the non-bettors on everything but "hard work." The illegal bettors said they needed less "hard work" than any other group.

The mean discrepancies between how much people say they need and how much they say they have were also computed. (Table 5.11) A positive discrepancy means people say they have more than they need, and a negative discrepancy means they say they need more than they have. Considering the greatest discrepancies, the emergent pattern is people who placed illegal bets on the horses in 1974 report needing more "luck", "money", "success", "savings", and "chances to get ahead" than they have, and less "hard work" and "close, comfortable relationships" with other people than they have.

5.12 Ratings of Excitement

Excitement ratings¹ for betting on horses at the track and with bookies

1. Details on the excitement ratings are provided in Chapter Nine.

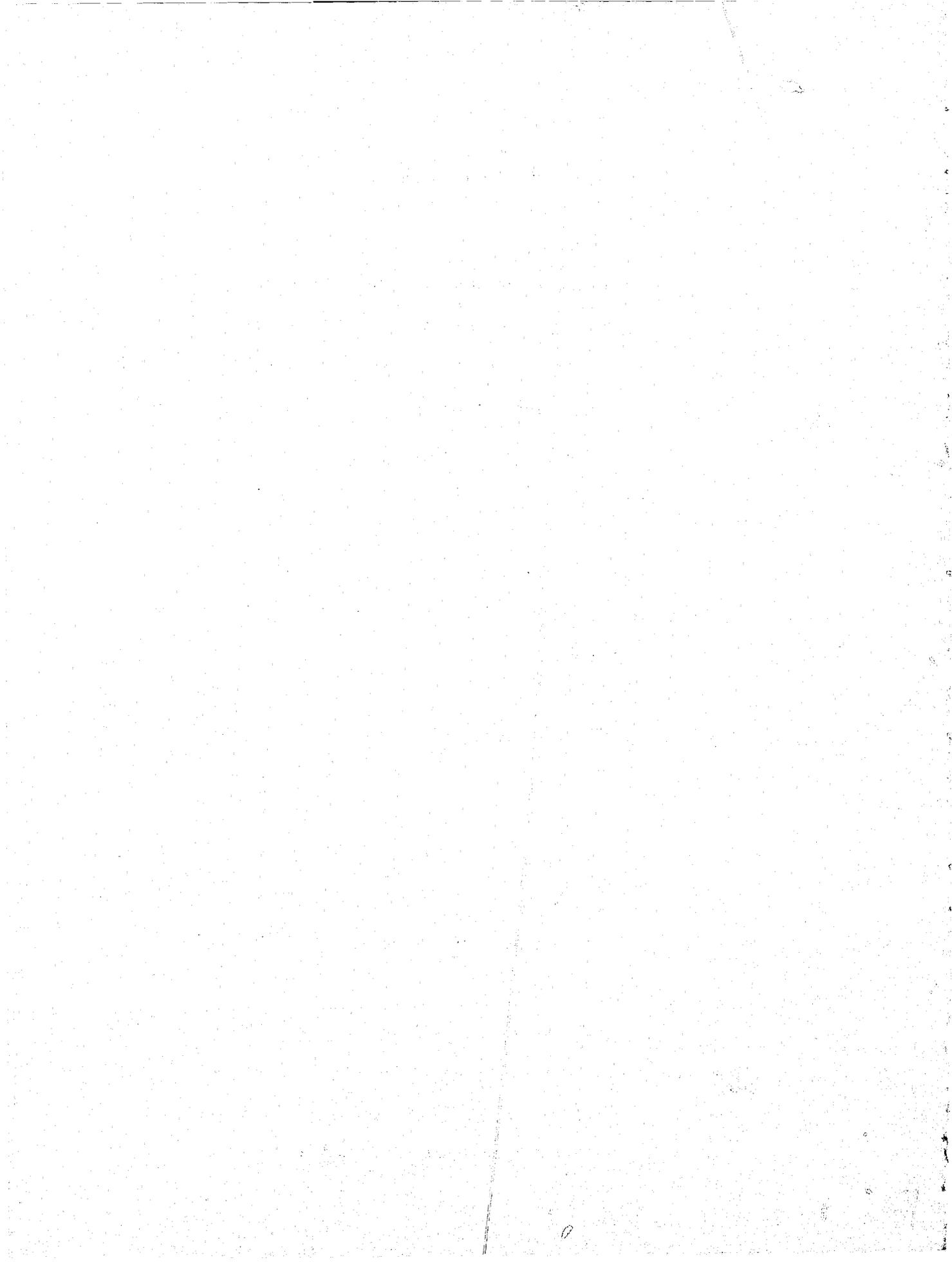


Table 5.11

Need and Need Fulfillment and Horse Bettors*

	Mean Need ^a				Need Fulfillment ^b			
	Total Sample	Non Bettors	1974 Legal Horse Bettors	1974 Illegal Horse Bettors	Total Sample	Non Bettors	1974 Legal Horse Bettors	1974 Illegal Horse Bettors
Control over own life	5.85	5.45	6.16	6.00	-40	-32	-29	+4
Close, comfortable relationships	5.81	5.59	6.04	5.90	-3	-6	-5	+45
Interesting things to do	5.76	5.34	6.14	6.30	-50	-34	-47	-45
Well mannered associates	5.75	5.51	6.14	6.51	-23	-23	-42	-62
Things to look forward to	5.73	5.43	5.84	6.08	-9	-2	-3	-3
Success	5.41	5.04	5.81	6.02	-35	-38	-42	-88
Money	5.19	4.80	5.55	6.11	-112	-113	-117	-159
Chances to get ahead	5.09	4.69	5.52	5.96	-54	-63	-55	-71
Savings	5.03	4.68	5.42	5.74	-147	-144	-144	-167
Challenges	4.96	4.29	5.75	5.48	-19	-12	-44	-24
Time for recreation	4.82	4.23	5.37	5.67	-33	-8	-65	-62
Hard work	4.47	4.40	4.76	4.17	+107	+79	+109	+155
Luck	3.99	3.61	4.37	5.05	-16	-8	-7	-77
Excitement	3.71	2.89	4.74	4.68	+62	+89	+32	+84
Power	3.17	2.85	3.66	3.54	+1	+2	-19	+6

*Note: Positive values indicate that people say they have more than they need; negative values indicate they need more than they have.

^aSee pages 55 and 56 of Appendix D: Questionnaire. Scale: 1(Not at all ___) to 8 (Very ___).

^bDerived by subtracting "need" from "have" scores and multiplying by 10 for ease of presentation.

are presented in Table 5.12. For both on and off-track betting, non-bettors gave significantly lower excitement ratings than track bettors, who in turn gave significantly lower ratings than did the bookie bettors. Further, all of the groups, including the bookie bettors, rated betting on horses at the track as more exciting than betting on horses with a bookie. As with other forms of betting discussed earlier, the participation rate is related to the excitement, or degree of head-on competition, involved.

5.13 Reasons People Play

All respondents were asked to give as many as three reasons why they bet on horses at the track and/or with a bookie if they had done so in 1974. If they had not done so, they were asked to give as many as three reasons why they didn't bet on horses at the track and/or with bookies.

The reasons why respondents bet on the horses lent themselves readily to grouping into two categories--money related and interest in the activity. A preponderance of the reasons given by people who bet only at the track were activity related. The three reasons most frequently mentioned by those who bet only at the track were "to have a good time," "excitement," and "challenge." The three most frequently mentioned reasons among those who bet only with bookies were "to make money," "challenge," and "to pass the time." People who bet at the track and with bookies mentioned interest in the activity and money related reasons with about equal frequency. The three most frequently mentioned reasons among these respondents were "to make money," "challenge," and "excitement." For the New York legal OTB bettors the most frequently given reasons were "to make money," "challenge," and "to have a good time."

Table 5.12

Mean Ratings of Degree of Excitement of Betting on
Horses at the Track and with a Bookie*

Excitement Ratings	Total Sample	Non Bettors	1974 Legal Horse Bettors	1974 Illegal Horse Bettors
Betting on horses at the track	3.98	2.50	6.59	6.71
Betting on horses with a bookie	2.06	1.67	3.12	4.35

*Note: 1 = Not at all exciting; 8 = Very exciting.

Reasons people gave for not betting at the track or with bookies were grouped into five major categories: money related, activity interest related, moral consequences, legal consequences, and social consequences. The most frequently mentioned reasons for not betting on the horses, either at the track or with a bookie, were activity/interest related. The three most frequently mentioned reasons among people who bet on something but not on the horses, were: "I don't know anything about it," "I have other things to do," and "I never think about it." The fourth most frequently mentioned reason was "I don't want to disobey the law." The three most frequent reasons for not betting at the track given by people who bet on the horses only with bookies were: "I'm not interested in it," "I never think about it," and "I have other things to do." The most frequently mentioned reasons for not betting on OTB in New York were "It's a waste of money," "I'm not interested in it," and "I don't know anything about it."

In summary, track bettors mention the recreational aspects of going to the track as their primary reasons while bookie bettors seem motivated by a mixture of challenge and possible financial gain. People who don't engage in a particular form of betting on horses seem to be generally not interested in that form of betting rather than being concerned with the social or moral consequences of betting. However, those who bet only at the track frequently mention that they don't bet with bookies because they don't want to disobey the law. (Tables 5.13-1 and 5.13-2)

5.14 Beliefs About and Attitudes Towards Legalization

Residents were not fully aware of the legal status of horse tracks in their own state. Where tracks were legal, only 82 percent were aware of

Table 5.13-1

Reasons People Give for Betting on the Horses*

	R's Who Bet at the Track Only %	R's Who Bet with a Bookie Only %	R's Who Bet at the Track & with Bookies %	New York OTB %
Activity related	98	85	77	87
Money related	37	68	73	73

*Notes: Columns sum to over 100 percent due to multiple responses.

Respondents chose one, two or three reasons from a list of 11 reasons provided.

Table 5.13-2

Reasons People Give for Not Betting on the Horses*

	Reasons Why			New York DTB %
	R's Who Bet on Other Things Don't Bet on Horses %	R's Who Bet at the Track Only Don't Bet With Bookies %	R's Who Bet with a Bookie Only Don't Bet at Tracks %	
Activity related	77	60	75	91
Money related	59	44	62	64
Legal consequences	11	34	5	9
Moral consequences	8	14	7	1
Social consequences	4	17	3	0

*Notes: Columns sum to over 100 percent due to multiple responses.

Respondents chose one, two or three reasons from a list of 18 reasons provided.

it and where tracks were not legal only 76 percent knew that. (Table 5.14-1)

In states where tracks are legal, respondents were asked if they would like to see legal track betting continued or abolished. If the response was "continued," the respondent was counted as positive towards legalization; if "abolished," he was counted as negative towards legalization. The same positive and negative categories were created for respondents in states where betting at the track is not legal by asking whether or not the respondent was definitely in favor of legalization, tended to be in favor, tended to be against it, or definitely was against legalization in their state. In the total sample, 62 percent say they want horse-tracks legal but this positive position is not the true picture because only 47 percent of the people who believe horse tracks are not currently legal, regardless of whether they are or not, say they want them made legal. (Table 5.14-2)

When attitudes toward legalization of tracks are examined within various demographic subgroups it is found that more people in the West are favorable to legalization. Regional favorability follows the status quo.

A greater proportion of people with higher incomes and those with more education are favorable towards legal tracks. Those who are younger and people living in urban and suburban areas are more favorable to legalization than are older people and those living in non-urban areas. Single people, other than the widowed, are most favorable towards legalization.

(Table 5.14-3)

Table 5.14-1

Percent Reporting on Legality of Track Betting

Reports	Actual Situation	
	On Track Betting %	On Track Betting Illegal %
Legal	82	5
Illegal	10	76
Don't know	8	17
No answer	0	2

Table 5.14-2

Attitudes Towards Legalization of Track Betting

	Total Sample %	States Where Legal %	States Where Not Legal %
Positive to legalization	62	68	50
Negative to legalization	26	19	43
Unsure	10	13	3
No answer	2	0	4

Off-Track Betting. When asked about legalization of off-track betting on horses only 38 percent of the population were clearly in favor of it. Another 10 percent were either unsure or did not answer. Only among the divorced or separated did a majority say they favor legalization of off-track betting. In the Northeastern United States an even 50 percent favor legal off-track betting, and an additional nine percent either were unsure or did not answer. Again we remind the reader that a legal OTB operation is in existence in the Northeast which is reflected in these scores. In no other section of the country did legal off-track betting show the likelihood of majority support. Legal off-track betting receives greater support from people with higher incomes, more education, and from those living in the more urbanized areas. (Table 5.14-4)

In states where on-track betting is legal a substantially higher proportion of the respondents favor the legalization of off-track betting than in states where track betting is not legal. Even so, a greater proportion of respondents are against legalization of off-track betting than are in favor of it. In states where on-track betting is not legal, there are over twice as many who are against legalization of off-track betting than there are favoring it. Although almost 40 percent of the sample favors legalization of off-track betting, only 14 percent of the population say they would bet off-track if it were legal. (Tables 5.14-5 and 6)

If the respondent had bet on the horses with a bookie in 1974 he was asked a series of questions concerning his willingness to switch to a legal off-track betting system. Fifty-five percent said they would use a legal system exclusively. If the respondent said he would not use a legal OTB

Table 5.14-3

Demographic Characteristics and Attitudes Towards
Legalization of Horse Tracks

	Positive to Legalization %	Negative to Legalization %	Unsure %	No Answer %	Total %
<u>Total sample</u>	62	26	10	2	100
<u>Geographic Region</u>					
Northeast	69	17	14	0	100
North Central	63	25	10	2	100
South	51	38	8	3	100
West	73	17	10	0	100
<u>Income</u>					
Less than \$5,000	43	38	16	3	100
\$5,000-\$10,000	58	33	6	3	100
\$10,000-\$15,000	63	23	11	3	100
\$15,000 and over	71	20	9	0	100
<u>Marital Status</u>					
Married	62	27	10	1	100
Divorced/Separated	72	15	13	0	100
Widowed	45	36	12	7	100
Never married	71	21	8	0	100
<u>Education</u>					
Less than high school	47	36	12	5	100
High school	65	24	10	1	100
Some college	70	21	9	0	100
College degree	77	13	10	0	100
<u>Age</u>					
18-24 years	72	21	6	1	100
25-44 years	68	22	9	1	100
45-64 years	58	25	14	3	100
65 and over	42	45	10	3	100
<u>Distance from 25 largest cities</u>					
Less than 25 miles	70	17	11	2	100
25-49 miles	70	20	10	0	100
50 miles or more	56	32	10	2	100

Table 5.14-4

Demographic Characteristics and Attitudes Towards
Legalization of Off-track Betting

	Positive to Legalization %	Negative to Legalization %	Unsure %	No Answer %	Total %
<u>Total sample</u>	38	51	5	5	100
<u>Geographic Region</u>					
Northeast	50	41	6	3	100
North Central	40	50	5	5	100
South	27	60	5	8	100
West	39	52	6	3	100
<u>Income</u>					
Less than \$5,000	27	59	6	8	100
\$5,000-\$10,000	35	52	9	4	100
\$10,000-\$15,000	38	50	5	7	100
\$15,000 and over	44	48	4	4	100
<u>Marital Status</u>					
Married	38	52	4	6	100
Divorced/Separated	58	30	10	2	100
Widowed	20	57	9	14	100
Never married	38	54	7	1	100
<u>Education</u>					
Less than high school	30	55	6	9	100
High school	38	54	4	4	100
Some college	43	49	6	2	100
College degree	50	41	5	4	100
<u>Age</u>					
18-24 years	38	55	4	3	100
25-44 years	45	44	6	5	100
45-64 years	36	53	6	5	100
65 and over	21	66	5	8	100
<u>Distance from 25 largest cities</u>					
Less than 25 miles	46	45	7	2	100
25-49 miles	45	51	2	2	100
50 miles or more	32	56	5	7	100

Table 5.14-5

Attitudes Towards Legalization of
Off-Track Betting

	Total Sample %	States Where On-Track Betting Is Legal %	States Where On-Track Betting Is Not Legal %
Positive to legalization	38	42	29
Negative to legalization	51	47	61
Unsure	5	6	4
No answer	6	5	6

Table 5.14-6

Willingness to Bet Legally Off-Track

	Total Sample %
Would bet	14
Would not bet	73
Don't know	2
No answer	11

operation instead of the illegal one he was asked what characteristics would make legal OTB more attractive and which features would be absolutely necessary in order to induce him to use it. An additional 33 percent of the 1974 bookie bettors said they would use a legal OTB system if certain features were added to attract them. The primary desirable characteristics were no taxes on winnings, payoff as good as with bookies, and telephone service. These three characteristics were also those which were chosen as absolutely necessary by the greatest percentage. Payoff as good as with bookies is considered most necessary. The results indicate that if such desirable features as tax exempt winnings and payoff equal to that of the illegal game were contained in a legal OTB operation, that operation could draw all but about 12 percent of the illegal market.

(Tables 5.14-7 and 8)

In New York there is a legal OTB operation which originated as both a revenue generator and a substitute for illegal gambling. It is producing revenue but the problem of diversion of illegal activities seems in question. Thirteen percent of New York City residents said they used OTB in 1974. When asked whether they had bet on horses with a bookie before OTB went into operation, two thirds of the OTB players said no. That means OTB's clients come primarily from new sources. But, more importantly, 27 percent of those who bet with OTB in 1974 had not bet with a bookie before they bet with OTB and currently were betting with a bookie as well as OTB. That projects to 67 thousand people. On the other side, 11 percent of those who bet with OTB in 1974 had previously used a horse book but were no longer doing so. That projects to 58 thousand people for a net gain

Table 5.14-7

Willingness to Use a Legal OTB System
Instead of Bookies

	1974 Bookie Bettors %
Would use legal OTB instead of bookie if available	55
Would use legal OTB instead of bookie if available and desirable features added	33
Would not use legal OTB instead of bookie	12

Table 5.14-8

Features Desirable and Necessary in a Legal
OTB System*

(Base: 1974 Bookie Bettors who initially said they would not use legal OTB)	Desired Features %	Necessary Features %
Telephone service	34	23
Credit	15	2
Flexible settlement dates	5	2
Payoff as good as bookies	45	36
No income taxes on winnings	55	24
Would not use legal OTB at all	28	--
No features absolutely necessary	--	11

* Note: Columns sum to more than 100 percent due to multiple responses.

for the illegal operations of 8 thousand people. (Table 5.14-9)

Whether the past bookie bettors would have ceased to bet with bookies or whether those who did not previously bet with bookies would have started to do so in spite of OTB is a question which cannot be answered in the framework of the present study.

The New York respondents were also asked whether there was a tax on OTB which didn't get taken out at the track (at the time of the study a five percent surtax was in effect). Less than 40 percent of the New York sample knew such a tax was in effect. Surprisingly, even fewer of those who bet illegally on the horses in 1974 knew of the tax, but two thirds of OTB bettors knew and 78 percent of its former bettors knew.

Those who knew of the OTB surtax were asked if they would use OTB or use it more if the tax were eliminated. The illegal horse bettors clearly regard the tax as a deterrent to betting on OTB. Over 70 percent of them said they would use OTB or use it more if the tax were eliminated. Only 35 percent of the total sample said they would do so. (Table 5.14-10)

Fifty-four percent of the current users said they would use it more but none of those who stopped using it before 1974 said they would begin again if the tax were done away with.

Those who bet with bookies in 1974 were then asked what features would be desirable and then necessary to induce them to switch from betting with bookies to the OTB system. The most frequently mentioned characteristic was no income taxes on winnings. Credit was mentioned by one-fifth of the bettors as a desirable but not necessary characteristic. None of the

Table 5.14-9

OTB and Bookie Betting

	All 1974 OTB Bettors (756,000)	1974 OTB Bettors Who Also Bet Illegally in 1974 (224,654)	1974 OTB Bettors Who Did Not Bet Illegally in 1974 (531,317)
<u>Bet on horses with a bookie before OTB started</u>	%	%	%
Yes	34	73	11
No	$\frac{66}{100}$	$\frac{27}{100}$	$\frac{89}{100}$

Table 5.14-10

Knowledge of the Surtax on OTB

	Total New York Bettors %	1974 New York Horse Bookie Bettors %
<u>Is there an extra tax on OTB</u>		
Yes	39	31
No	8	18
Don't know	36	51
No answer	$\frac{17}{100}$	$\frac{0}{100}$
<u>Would use OTB more if no tax</u>		
Yes	35	71
No	62	29
Don't know	3	0
No Answer	$\frac{0}{100}$	$\frac{0}{100}$

bettors said that telephone service would make the OTB system more attractive (i.e., desirable) to them, but over a fifth said it was a necessary characteristic before they would switch to OTB. (Table 5.14-11) At first glance this seems inconsistent, but it is possible that the bettors were simply reacting to the questions in the way in which they were worded. There is nothing inherently "attractive" about telephone service, but it may be an indispensable feature for a sizeable number of bookie bettors. Those who bet with a bookie were next asked if they would switch to the OTB system in New York entirely if the necessary features they had indicated were implemented. Sixty-nine percent said they would. This compares to the 88 percent in the national sample of people who bet on horses with a bookie who said they would use an OTB system exclusively if it had all the features they thought necessary, and perhaps 69 percent is the more realistic estimate.

When bettors across the country were asked about the possible consequences of legalizing off-track betting, a majority in the United States sample said they thought positive economic consequences such as more jobs for people and more money to run the government would accrue. Almost half thought legal off-track betting would provide a chance for the common man to get rich, and only a third believed there would be less money for organized crime if off-track betting were legalized. Compared with New York, where respondents presumably have more basis in experience for their beliefs, a greater percentage of the national sample saw jobs for people as a possible benefit, and a smaller proportion of the national sample thought there would

Table 5.14-11

Features Desirable and Necessary Before
New York Bookie Bettors would Be Willing to Switch to OTB*

	Desired Features %	Necessary Features %
Telephone service	0	22
Credit	19	4
Flexible settlement data	0	4
Payoff as good as bookies	9	9
No income taxes on winnings	64	42
Would not use at all	4	4
No features absolutely necessary	0	9

*Note: Columns sum to more than 100 percent due to multiple responses.

be more money to run the government.

On the negative side, the greatest percentage, both nationally and in New York, thought people would gamble more than they could afford and work less due to gambling if off-track betting were legalized. The smallest proportion, both nationally and in New York, thought that infiltration of organized crime would be a problem. New Yorkers deviated from the rest of the country most on their perception of children being influenced to gamble. Only 33 percent of them saw this as a problem while almost twice that many saw it as a problem in the national sample. (Table 5.14-12)

Table 5.14-12

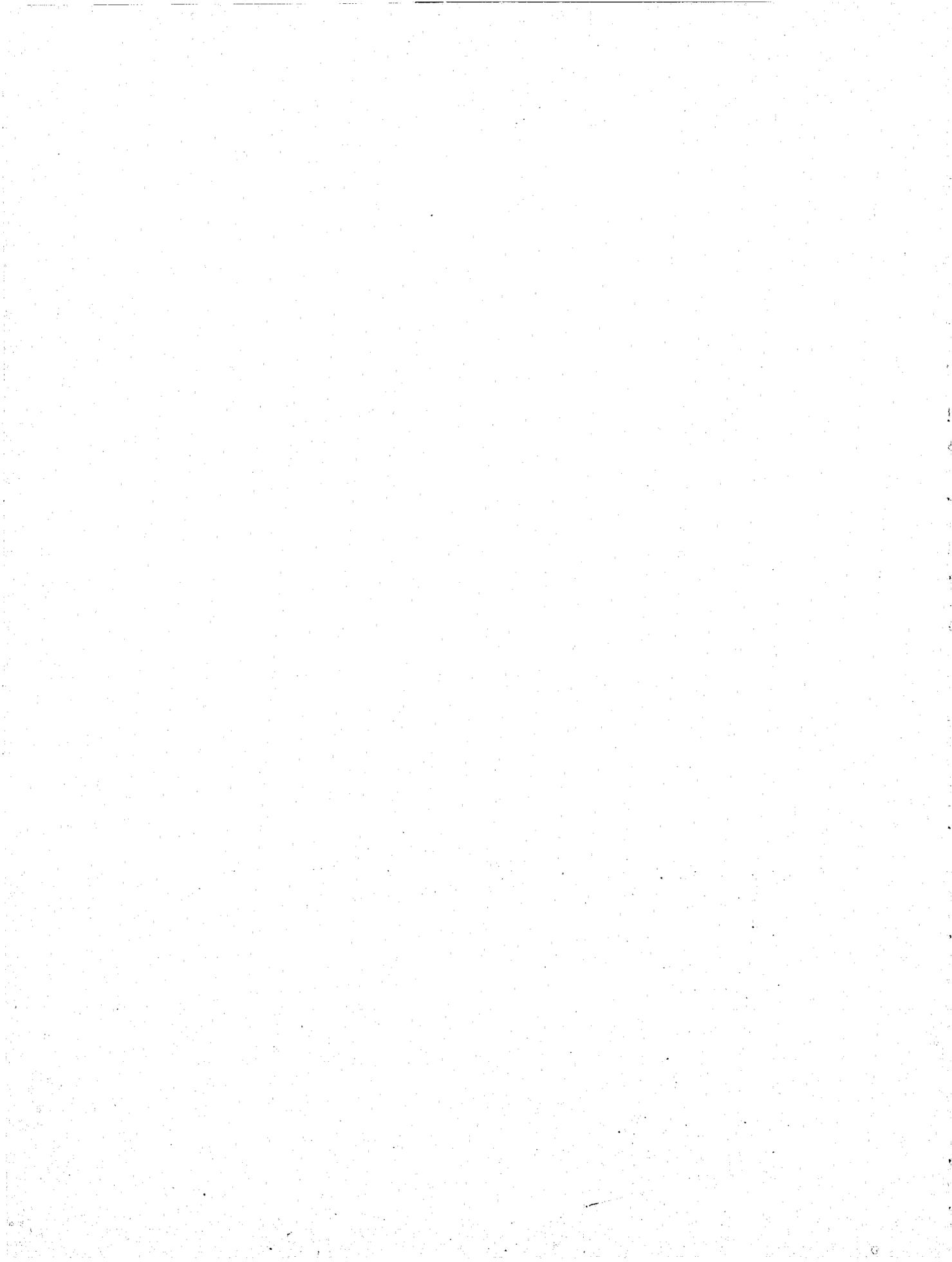
Perceived Consequences of Legal
Off-Track Betting

	National Random Subset of Bettors %	New York Bettors %
<u>Positive consequences</u>		
More jobs for people	71	63
A lot more money to run the government	53	77
More of a chance for the common man to get rich	49	57
Less money for organized crime	33	26
<u>Negative consequences</u>		
More people working less because they are gambling	63	51
More of a chance that children will be influenced to gamble	60	33
More people gambling more than they can afford	55	61
More racketeers connected to it	13	17



CONTINUED

3 OF 7



CHAPTER SIX

CASINOS

Twenty-seven percent of the total sample say they have bet at a casino at some time in their lives. The definition of "casino" was left very broad: including everything from the elaborate and legal full-service facilities found in Las Vegas or Reno to blackjack games in the backroom of the corner bar, to slot machines in service clubs overseas. Fully 56 percent of people who live in the West say they have been to a casino. This reflects the importance of proximity to casino gambling in determining the incidence. An alternative to physical proximity to casinos, of course, is having enough money to fly to Nevada or the Caribbean.

Nearly ten percent of the total sample said they bet at a casino in 1974. (Table 6.1-1) The average amount bet by casino bettors was \$448, which works out to about \$42 per capita. In the aggregate, we estimate the Nevada casino handle at \$6,076,000,000 which compares to a published casino handle figure of \$6,693,000,000 for a discrepancy of 10 percent. Of the total handle about 15 percent or \$1,004,000,000 was the take-out, or total amount lost by casino bettors.¹

6.1 Who Gambles at Casinos

Men were a little more likely to have bet than women, and proportionately more non-whites went to casinos than whites. There were marked age

1. See Chapter Three for information on income incidence and regressivity of casino betting.

Table 6.1-1

Demographic Characteristics
and Casino Betting

	1974 Casino Bettors %
Total sample	9.6
<u>Sex</u>	
Male	10.5
Female	8.9
<u>Race</u>	
White	9.4
Non-white	11.0
<u>Age</u>	
18-24 years	6.4
25-44 years	12.0
45-64 years	10.2
65 and over	3.5
<u>Distance from 25 largest cities</u>	
24 miles or less	12.2
25-49 miles	13.4
50 or more miles	7.3
<u>Region</u>	
Northeast	9.3
North central	4.9
South	1.9
West	31.1
<u>Family income</u>	
Under \$5,000	4.1
\$5,000-\$10,000	8.3
\$10,000-\$15,000	6.4
\$15,000 and over	14.2
<u>Marital status</u>	
Married	9.0
Divorced or separated	18.0
Widowed	4.8
Never married	11.7
<u>Education</u>	
Less than high school	4.3
High school graduate	8.4
Some college	14.9
College graduate	15.9
<u>Ethnic background</u>	
West European	11.0
East European	11.7
British	10.6
Irish	10.1
Spanish-speaking	22.1
African	6.3
Italian	9.1
Other	6.3
<u>Religion</u>	
Catholic	10.3
Jewish	23.0
All protestant	9.2
Presbyterian, Lutheran, Congregational, Episcopal	12.9
Bible sects	4.0
Methodist	12.3
Baptist	3.9
Others; no preference	7.1

differences; people under 25 or over 65 were much less likely to have gone than people in the middle ranges. Higher income and education are strongly related to the incidence of casino gambling. People living in the suburbs went more frequently than people living in other settings.

Current proximity to Nevada is clearly an important factor. People living in the West were much more likely to have gambled at a casino in 1974; nearly a third did so. Divorced, separated, and never-married people, and people of Spanish-speaking backgrounds went to casinos much more than others; this is partly due to the fact that more of them live in the West. Among religions, Jewish people were much more likely than others to have gone to a casino in 1974.

Casino bettors are much like the general population in terms of family characteristics, such as happiness of home life, understanding of spouse, number of marriages and children, and problems of children. Stability measures of casino bettors are likewise similar to those of the total sample. Comparing number of moves in the last three years, number of years at current residence, and whether respondents would move from the city or state, casino bettors are not differentiated. There are a few more renters and fewer home owners among casino bettors than among the general population. Casino players in general grew up in more urbanized areas where there is more gambling around, than the population as a whole.

With respect to childhood religious influences, more casino gamblers tend to come from backgrounds where gambling was regarded as merely "undesirable," and fewer from those where it was deemed "sinful." There is no difference in childhood church attendance between casino gamblers and the

Table 6.1-2

Frequency of Church Attendance and Service Experience
by Casino Gamblers Compared to Total Sample

	Frequency of Church Attendance			
	Childhood		Current	
	Total Sample %	Casino Bettors %	Total Sample %	Casino Bettors %
<u>Church attendance</u>				
Once a week or more often	68	71	34	22
Frequently (once a month or more)	14	13	20	20
Sometimes	11	12	22	36
Never	7	4	24	22
<u>Service experience</u>				
No			76	69
Yes			24	31
Overseas			16	18
Not overseas			8	13

Table 6.1-3

Financial Characteristics of Casino Gamblers
Compared to Total Sample

	Total Sample %	Casino Bettors %
Own land	28	30
Own stock	29	42
Own bonds	32	36
Have two months cash reserves	61	80
Are covered by social security	88	82
Have pension	60	68
Owe money	38	36
Mean amount owed (for those who owe)	\$2600	\$3400

total population. Current frequency of church attendance, however, is a good deal lower for casino bettors compared to the total population. (Table 6.1-2)

Another possible avenue of exposure to gambling was expected to be military service. In the group interviews which preceded the study, a fair number of participants said they first started gambling in the service, and a number of them mentioned the availability of slot machines in service clubs overseas. Table 6.1-2 indicates that having been in the service does seem to be somewhat related to casino gambling; the additional fact of having been stationed overseas does not seem very important.

Similarly, job characteristics reported by casino bettors match the overall averages: mean number of years on job, mean years since a raise, mean hours worked, days missed, days late, and whether the job measures up to the respondent's ideal. There are no differences in job, stability, or family characteristics that clearly distinguish casino bettors from the general population.

There are, however, some economic differences. (Table 6.1-3) Casino bettors have the highest proportion of stockholders and also the highest mean total assets of any gambling group. (Non-bettors are the lowest on each measure.) They also have the highest proportion of people with at least two months' cash reserves, but also have the largest average amount of debt.

In sum, casino bettors are much better off financially than non-bettors, and are somewhat more affluent than other kinds of bettors. Casino bettors tend to have higher incomes, which undoubtedly account for the

relationships between the above financial characteristics and casino betting.

6.2 Casino Trips and Casino Games

Eighty four percent of 1974 casino bettors went to Nevada; another 30 percent went to a legal casino outside the United States. Only six percent went to an illegal casino in the United States. They made an average of 32 trips during their lifetime and 2.4 trips during 1974, spending an average of nearly three days on each trip. Only two percent of trips were "junkets"¹; most people seem to plan and make trips to Nevada on their own. Only 32 percent of 1974 casino bettors said they took a trip where the main purpose was to gamble. It would seem that a lot of people gamble in Nevada only because they happen to be there for a convention or conference; others stop on their way to or from visits to the West coast.

Almost all 1974 casino bettors played slot machines (Table 6.2-2); they did so an average of three hours a day. Of these players, 19 percent claimed to have won an average of 84 dollars, while 64 percent said they lost an average of 50 dollars on the slot machines. Eleven percent of all casino players (but fully 20 percent of slot machine losers) lost more than they expected to lose on the slots.

Table games are popular, too. Nearly half of 1974 casino bettors played blackjack and keno, while around a third played roulette and craps. Eighteen percent of table players claimed to have won an average of about 100 dollars, while 47 percent lost an average of 35 dollars. Six percent of all casino players (13 percent of losers) lost more than they expected to at the tables.

1. See Glossary

Table 6.2-1

Gambling Trips Taken in 1974 and in Lifetime
by 1974 Casino Bettors

1974 Casino Bettors	
<u>In 1974</u>	
Mean number trips where gambled	2.4 trips
Took trip, main purpose to gamble	32%
Mean number trips to gamble	2.3 trips
<u>In Lifetime</u>	
Mean number trips where gambled	32.1 trips
Took trip, main purpose to gamble	37%
Mean number trips to gamble	13.5 trips

Table 6.2-2

Winning and Losing Among Casino Bettors in 1974

	% who Played	% of Players Who won	Mean Amount Won	% of Players Who Lost	Mean Amount Lost
Slot Machines	87	19	\$84	64	\$50
Blackjack	47	18	\$100	47	\$35
Roulette	37				
Keno	43				
Craps	29				

Clearly, people are more likely to get "hooked" by slot machines, and to gamble and lose to excess on them, compared to table games. Perhaps it is the persistence of expectations of a high payoff jackpot, (statistically, a low probability event) that will in one motion recoup all the night's losses, that leads people on. It takes a lot longer to rebuild losses playing blackjack or roulette, as the individual payoffs are lower even though the probabilities are higher. "One more bet" on table games simply cannot make as much difference in the night's net winnings or losses as it can in slot machines.

6.3 Leisure Time

Gambling of all kinds can be considered a type of recreational activity. While some people use their leisure time to participate in sports, attend sports or cultural presentations, watch television, or visit with friends, others go to horse races, play bingo, or go to casinos. It was hypothesized that gamblers would be more oriented toward recreation than non-gamblers. That is, they would take more vacation days, spend more money on vacations, participate in more recreational activities, and spend more money on them. Our interest here is in the recreational activities of 1974 casino bettors.

Casino bettors took an average of 27 days of vacation, compared to 18 for the total sample. (Table 6.3-1) They took more vacations than any other type of bettor. Only seven percent took no vacation, compared to 23 percent of the total population. And the median amount spent for vacations was about 650 dollars, compared to about 210 dollars for the total sample. Casino bettors clearly take a lot more vacation, and spend more than the

Table 6.3-1

Casino Bettors and Recreation

	Total Sample	1974 Casino Bettors
Mean days vacation	18 days	27 days
Took no vacation	23%	7%
Median amount spent for vacations	\$210	\$650
Mean amount spent weekly on recreation	\$8	\$17

Table 6.3-2

Mean Number of Days Spent on Recreational Activities

	Total Sample	1974 Casino Bettors
Watch television	213	196
Read newspapers or magazines	209	237
Do nothing, nap, daydream	106	94
Read books	93	131
Home improvements, gardening	84	68
Socialize with friends and relatives	84	93
Church or related activities	57	42
Knitting, sewing, etc.	46	46
Consuming alcohol (except at meals)	44	73
Participate in active non-team sports	27	38
Fishing, hunting, camping, etc.	25	32
Doing arts and crafts	21	24
Attending sports events	19	22
Participate in active team sports	18	24
Attending nightclubs, bars, dancing	18	34
Participating in community activities	17	24
Attend movies or theatre	13	19
Attend operas, lectures, museums	7	8

general population. These results are possibly due to the nature of casino betting itself. People must spend money to get to Nevada or the Bahamas or other areas where casinos are available. And while they are there, the time is usually characterized as vacation. Casino gambling is the only form of gambling which by definition requires people to spend so much time and money to participate. As for weekly recreation, all people spend an average of about eight dollars, but casino gamblers spend on the average 17 dollars a week for recreation. Remember that all of these high expenditures are partially influenced by the fact that casino bettors have higher income and assets than average.

Looking specifically at leisure time activities, 1974 casino bettors spent a lot less time than others on home improvements and gardening, watching television, at church activities, and "doing nothing," or daydreaming. (Table 6.3-2) Not surprisingly, they had a greater frequency of drinking alcoholic beverages and attending night clubs and large parties. In addition, they spent considerably more time than average participating in active team and non-team sports, participating in community activities, going to movies and the theater, and reading books. In general their activity patterns reveal casino bettors to be active, outwardly-oriented people (as opposed to passive, home-oriented). They spend more time on sports and recreation activities than others, and also spend money rather more freely on them.

6.4 Casino Bettors and Other Forms of Gambling

Casino bettors also participated in other forms of gambling. Thirty-eight percent bet on horses, 61 percent bet on sports, 35 percent bet on

bingo, 28 percent bought a lottery ticket, and 11 percent bet on dogs. Considering illegal betting among casino bettors, 26 percent bet on something illegal: six percent each bet on horses and numbers, 11 percent bet on sports, seven percent bet on sports cards, and nine percent bet with a bookie.

6.5 Exposure to Casino Gambling

It was hypothesized that, in general, greater exposure to a given type of gambling would raise the probability of a person's participation in that gambling form. We measured respondents' perceptions of their childhood exposure which clearly preceded their current participation. Current exposure is, of course, a circular variable: a person who is gambling is being exposed to more of it than a person who does not gamble, while childhood exposure, like childhood religious teachings, current laws, and current availability may be causal.

Current casino bettors had much higher levels of childhood exposure to others' gambling at casinos than the total sample or any other current bettor group. (Table 6.5-1) Current exposure exhibits the same pattern, only more extreme. There is a similar, but less pronounced pattern concerning slot machines; current bettors had more childhood exposure to people who played them. With regard to dice playing, current casino players had childhood and current exposure rates more similar to those of the total population.

One final measure of past exposure-availability is considered; it was thought that having lived in another state where different gambling games were legal might influence the respondents' current gambling practices.

Table 6.5-1

Exposure of Casino Bettors and Total Sample

	Casinos		Slot Machines		Dice	
	Total Sample %	Casino Bettors %	Total Sample %	Casino Bettors %	Total Sample %	Casino Bettors %
<u>Childhood exposure</u>						
Most/a lot	6	18	14	21	13	14
A few	16	25	23	25	23	27
None	78	57	63	47	64	59
<u>Current exposure</u>						
Most/a lot	17	54	19	54	13	18
A few	26	36	28	35	21	37
None	57	10	53	11	66	45

Table 6.5-2

Prior Availability of Casinos and Slot Machines

	Total Sample %	Casino Bettors %
Lived somewhere else	58	73
<u>Lived somewhere else where casinos were available legally</u>	<u>9</u>	<u>17</u>
Bet	67	47
Did not bet	33	53
<u>Lived somewhere else where casinos were available illegally</u>	<u>8</u>	<u>11</u>
Bet	25	36
Did not bet	75	64
<u>Lived somewhere else where slot machines were available legally</u>	<u>12</u>	<u>16</u>
Bet	42	44
Did not bet	58	66
<u>Lived somewhere else where slot machines were available illegally</u>	<u>10</u>	<u>14</u>
Bet	30	29
Did not bet	70	71

Respondents who had lived in another state as an adult (after 18) were asked about the legal and illegal availability of specific games, and further, whether they had bet on them at the time they lived there.

Nearly three fourths of casino bettors have lived somewhere else, the highest proportion of any bettor type. (Table 6.5-2) A lot more than average had legal casinos available to them at one of their former residences, and 47 percent of them had bet. Casino bettors likewise reported higher previous availability and betting at illegal casinos, and on legal and illegal slot machines. But prior availability of slot machines and frequency of betting on them by current casino bettors are similar to the total population.

In sum, current casino gamblers had higher levels of childhood exposure to casino gambling and more often lived someplace else where casino gambling was legally or illegally available. Other things equal, exposure and availability are important determinants of casino gambling behavior.

6.6 Excitement and Other Needs

Respondents were asked how much of each of a list of attributes they needed, and how much they thought they currently had in their lives. Both the mean levels and mean discrepancies of casino bettors were compared with those of the total sample.

Casino bettors claim to need and have more of everything than the total population. (Table 6.6) They claim to need a lot more excitement, challenge, interesting things to do, power, time for recreation, and control over their own life than people in general, and moderate amounts more

Table 6.6-1

Needs and Need Fulfillment of Casino Bettors*

	Mean Need		Need Fulfillment ^a	
	Total Sample	Casino Bettors	Total Sample	Casino Bettors
Control over own life	5.85	6.36	-40	-55
Close, comfortable relationships	5.81	6.02	-3	-10
Interesting things to do	5.76	6.43	-50	-76
Well mannered associates	5.75	6.13	-23	-48
Things to look forward to	5.73	6.13	-9	-37
Success	5.41	5.78	-35	-33
Money	5.19	5.34	-112	-102
Chances to get ahead	5.09	5.31	-54	-44
Savings	5.03	5.53	-147	-146
Challenges	4.96	5.87	-19	-71
Time for recreation	4.82	5.38	-33	-80
Hard work	4.47	4.84	+107	+120
Luck	3.99	4.16	-16	-17
Excitement	3.71	4.38	+62	+2
Power	3.17	3.63	+1	-18

^aScores multiplied by 100 for ease of presentation.

*Note: Positive values indicate that people say they have more than they need; negative values indicate they need more than they have.

of everything else. Casino gamblers need a lot more excitement than people in general--and they have it! Others need less excitement than casino gamblers, and need less than they have.

Comparing need discrepancies (what they say they need to what they say they have), casino bettors (and people in general) say they have more "hard work" than they need. Casino bettors say they are especially unfulfilled in their needs for "money," "challenges," "interesting things to do," "time for recreation," "savings," and "control over their life." The total population is only highly unresolved on "money," "savings," and "chances to get ahead."

6.7 Perception of Games

It was expected that current casino players would rate casinos differently than non-players on level of excitement, the luck or skill involved, and the probability of fixes.

Casino bettors do rate casinos, slot machines, and dice playing as more exciting than the general population. (Table 6.7) And they rate the probability of fixes in casinos and slot machines lower than the sample in general. But interestingly, casino bettors are more likely than non-bettors or any other type bettors to say casino gambling is more luck than skill. The same pattern prevails for their opinions of slot machines and dice playing. It had been expected that bettors of a given type of game would be more likely to claim the need for skill to succeed in their particular type of gambling. But it definitely is not true of casino bettors.

Table 6.7

Excitement, Fixes, and Luck Ratings of Casinos,
Slot Machines and Dice

	Total Sample	Casino Bettors
<u>Casinos</u>		
Mean excitement rating ^a	3.41	5.80
Mean fixes ^b	2.35	2.62
Mostly luck	53%	60%
Both	21	24
Mostly skill	15	16
Don't know	11	0
<u>Slot machines</u>		
Mean excitement rating ^a	3.39	5.26
Mean fixes ^b	2.32	3.05
Mostly luck	80%	96%
Both	6	2
Mostly skill	4	1
Don't know	9	1
<u>Dice</u>		
Mean excitement rating ^a	2.54	3.55
Mean fixes ^b	2.32	3.05
Mostly luck	63%	77%
Both	14	12
Mostly skill	11	8
Don't know	12	3

^aScale: 1 = not at all exciting; 8 = very exciting

^bScale: 1 = fixed most of the time; 2 = fixed pretty often;
3 = fixed sometimes; 4 = almost never fixed;
5 = never fixed.

Table 6.8-1

Attitudes Toward Legalization of Casinos and Slot Machines

	Total Sample %	Casino Bettors %
Favors legalization of casinos	41	74
Does not favor legalization	53	24
Don't care/don't know	<u>6</u> 100	<u>2</u> 100
Favors legalization of slot machines	40	68
Does not favor legalization	54	28
Don't care/don't know	<u>6</u> 100	<u>4</u> 100
Would bet on casinos if they were legal	26	62
Would bet on slot machines if they were legal	31	63
Would use local casino instead of current one	--	14
Would use local casino in addition to current one	--	58
Would not use local casino	--	28

6.8 Attitudes Toward Legalization of Casinos and Slot Machines

As expected, casino bettors are much more favorable to the legalization of casinos and slot machines than the total sample. (Table 6.8-1) More than twice as many casino bettors as the total sample would bet on casinos or slot machines if they were legal.

Fourteen percent of 1974 casino bettors would use a local casino if one were available instead of where they go now; 58 percent would use both local and distant casinos; and 28 percent would not use a local casino.

With respect to the expected positive and negative effects of legalizing casinos, casino bettors are more optimistic in general. (Table 6.8-2) While frequency of mentions of each of the expected negative consequences were nearly identical for casino bettors and the total population, many more casino bettors thought that legalization of casinos would create more jobs for people and provide more money for the government. On balance casino bettors are less negative than the total population with regard to the social effects of legalization.

6.9 Reasons Why People Say They Go (Don't Go) to Casinos

Expressed reasons for betting at casinos are overwhelmingly oriented toward gambling as a recreational (rather than money-related) activity; fully 81 percent mentioned the general reason "to have a good time." (Table 6.9) A similar number reported that gambling at casinos filled a more active need for "excitement" or "challenge". Another 44 percent said that casinos fulfilled a passive need for "something to look forward to" or a "way to pass the time". The total number of people mentioning any of these

Table 6.8-2

Expected Effects of Legal Casinos

	Total Sample %	1974 Casino Bettors %
A. Positive effects		
More jobs for people	69	78
A lot more money to run the government	66	76
Less money for organized crime	45	49
More of a chance for the common man to get rich	18	22
B. Negative effects		
More people gambling more than they can afford	76	71
More of a chance that children will be influenced to gamble	66	65
More racketeers connected to it	61	63
More people working less because they are gambling	43	44

"activity" reasons reaches 94 percent, compared to a total of only 43 percent who said they gambled at casinos to make money or to get rich.

The most frequent reason for not gambling at casinos was their non-availability; fully 48% of casino non-gamblers mentioned availability. Net activity reasons were mentioned by over half the people, as were net money reasons. Moral objections were raised by 8% of people; another 12% referred to the current illegality of casinos as a deterrent.

People mentioning availability and legality as reasons for not now gambling at casinos might become casino gamblers if they were legalized. Nearly half of non-gamblers said they were not interested or had other things to do. They have competing interests, and probably would be less likely to become casino gamblers. Those who mentioned that the odds were against you, plus those who could not afford it, probably would remain non-gamblers even if casinos were legalized.

In sum, casino gambling is regarded mainly as a recreational activity by most people. There are probably a lot of people who would participate if the availability problem were solved by legalizing casinos nearer to them. Financial reasons for casino gambling (or not) seem to be second in importance. Moral reasons against gambling were mentioned by surprisingly few people.

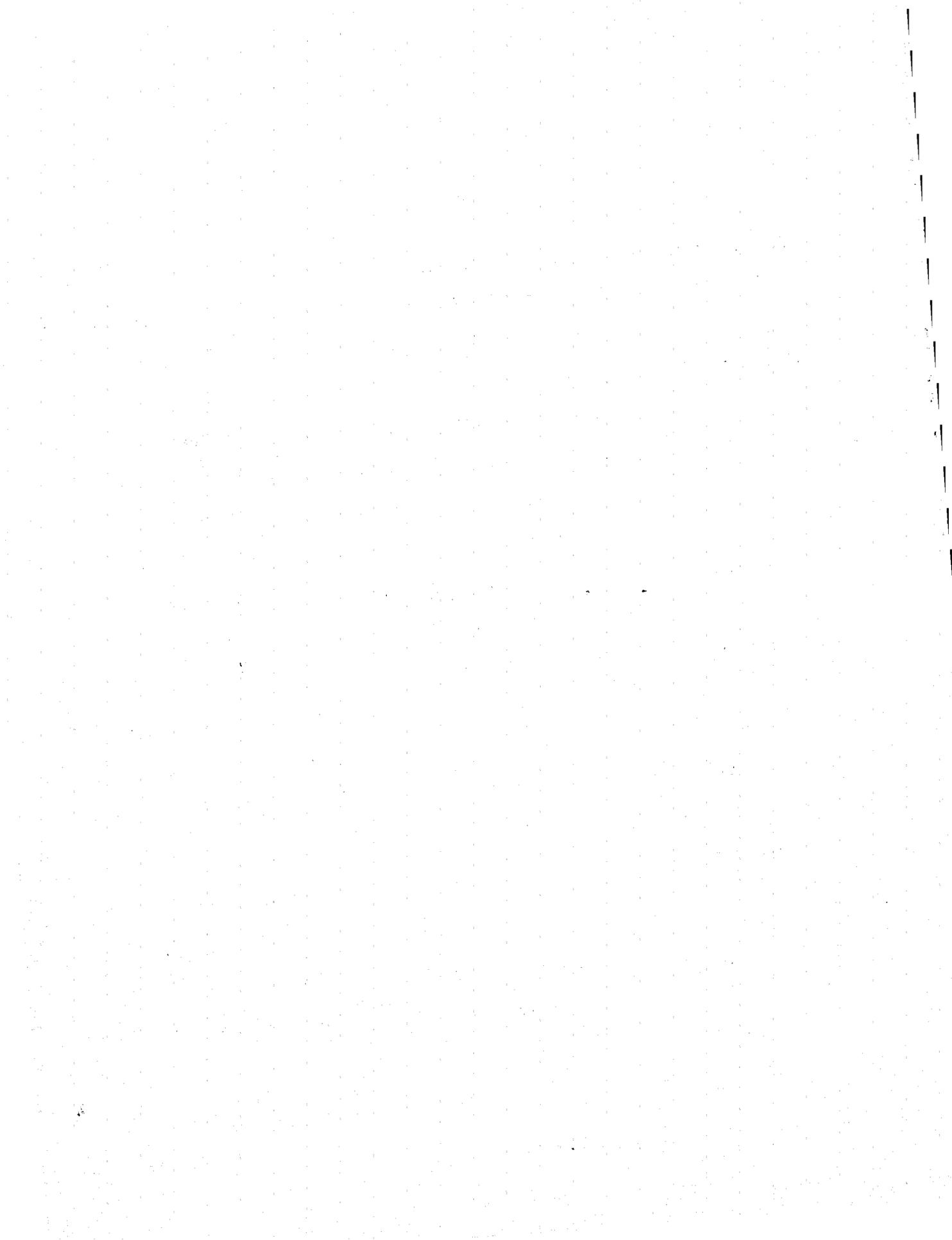
Table 6.9

Reasons for Betting or Not Betting at Casinos

Reasons for Betting at Casinos ^a	Bettors %
To have a good time	81
For excitement	47
Challenge	35
To make money	35
To pass the time	23
Something to look forward to	21
Chance to get rich	11
Net activity reasons	94
Net money reasons	43
Reasons for Not Betting at Casinos ^b	Non-bettors %
Not available	48
Don't know about it	27
Not interested	26
Other things to do	23
Don't think about it	22
Odds against you	22
Don't want to lose money	16
Don't have the money	16
Waste of money	14
Illegal	10
Not lucky	8
Net money reasons	53
Net activity reasons	55
Net moral reasons	8
Net legal reasons	12

^a Respondents chose one, two or three reasons from a list of 11 reasons provided.

^b Respondents chose one, two or three reasons from a list of 18 reasons provided.



CHAPTER SEVEN

BINGO

7.1 Participation Rates and Availability

Forty-three percent of the sample reported they have played bingo for money at one time or another during their lives, and 19 percent, which projects to 27.3 million Americans, played at least once in 1974. Bingo games are readily available, even in states where they are supposedly against the law. Overall, respondents report games are available an average of three to four days or nights a week, with somewhat greater availability reported in the Northeast and North Central states and less availability and participation in the South and West. As would be expected, more games are available in and near large cities rather than in outlying areas, but all participation rates do not vary directly with availability. Games are close to home. Almost everyone who answered the question agreed that games were no farther than walking distance or a short ride away. Games are especially convenient in the Northeast part of the United States, but even in the West and South where games are less frequently available, the games that do exist are close at hand. (Table 7.1)

7.2 Who Plays Bingo?

Bingo does not generally share the negative connotations associated with other types of gambling activity. In fact, bingo is often described simply as a game rather than as "gambling".

Table 7.1

Bingo Participation, Availability and Convenience

	1974 Bingo Participation	Mean Days Bingo Available	Bingo Games Located			
			Walking Distance	Short Ride	Long Ride	Don't know/ Not Asked
<u>Total Sample</u>	<u>19%</u>	<u>3.92</u>	<u>14%</u>	<u>46%</u>	<u>6%</u>	<u>34%</u>
Large urban areas	20	4.31	22	43	7	28
Suburbs	18	4.27	17	48	8	27
Other areas	19	3.39	8	46	5	41
Within 25 mile radius	16	4.34	20	41	9	30
25-49 mile radius	12	4.16	17	51	4	28
50 + mile radius	20	3.53	10	48	5	37
Northeast	25	4.38	25	57	4	14
North Central	22	3.99	14	54	6	26
South	11	3.28	10	35	10	45
West	17	3.40	4	29	6	61
States-Bingo legal	21	4.07	16	53	6	25
States-Bingo Not legal	16	3.64	12	36	7	45

The lighter, more positive image enjoyed by bingo in comparison to other forms of gambling is due primarily to three factors. First is its widespread association with charitable and church organizations, which helps to negate in part the "gambling" aspect of the activity and heighten its more innocuous "game" image. A second factor, closely related to the first, is the established stereotype of the bingo player. Bingo is commonly described as a "little old ladies" game. While this does not imply that only little old ladies play bingo, it clearly indicates that most people view bingo players as a conservative group, predominantly female, and somewhat elderly. In addition they are often perceived as belonging to a low income group which has relatively low educational achievement.

A third factor in this perception is the amount of money involved in bingo play. It is not thought of as "big time gambling." Most people think of bingo as a game of moderation which does not involve large sums of money.

An analysis of the data presented in Tables 7.2-1 and 7.2-2 yields not one image of the bingo player, but two. One explains why the stereotype of the bingo player exists, and the other substitutes an accurate image.

The typical bingo player has been described as female, elderly, not highly educated, and belonging to a low income group. The facts contradict this picture.

While more women than men play bingo the difference is not overwhelming. Twenty-one percent of women play bingo, but a comparatively large number of men (16 percent) also play. Two-thirds of the bingo

Table 7.2-1

Bingo Participation by Sex, Age, Income,
Marital Status and Education

Total sample	19%
<u>Sex</u>	
Male	16
Female	21
<u>Age</u>	
18-24	27
25-44	21
45-64	16
65 and over	8
<u>Income</u>	
Under \$5,000	9
\$5,000-\$10,000	19
\$10,000-\$15,000	20
\$15,000 and over	21
<u>Marital Status</u>	
Married	18
Divorced, separated	28
Never married	23
Widowed	12
<u>Education</u>	
Did not graduate high school	15
High School graduate	23
Some college	21
College graduate	16

Table 7.2-2

Frequency of Bingo Play of Selected Subgroups

	<u>HEAVY</u> Once a Week or More Often %	<u>MEDIUM</u> Once a Month %	<u>LIGHT</u> Less Than Once a Month %
Total Sample	<u>8</u>	<u>17</u>	<u>75</u>
<u>Sex</u>			
Male	1	14	85
Female	13	18	69
<u>Age</u>			
18-24	4	27	69
25-44	8	15	77
45-64	9	14	77
65 and over	15	5	80
<u>Income</u>			
Under \$5,000	25	13	62
\$5,000-\$10,000	4	15	81
\$10,000-\$15,000	12	11	77
\$15,000 and over	6	22	72
<u>Marital Status</u>			
Married	6	17	77
Divorced, separated	20	10	70
Never married	0	20	80
Widowed	43	10	47
<u>Education</u>			
Did not graduate high school	10	9	81
High School graduate	8	23	69
Some college	6	16	78
College graduate	5	16	79

players are under 45 years of age, with significant under-representation of those 65 and over and significant over-representation of those 18 to 24 years of age. Bingo participation is progressively more prevalent as income rises, with only 24 percent of the players having incomes of less than \$10,000 a year while 31 percent of the population at large has incomes below that level. Bingo games draw more heavily from the single population, with the exception of the widowed. Twenty eight percent of the divorced or separated group and 23 percent of the never married group play bingo while only 12 percent of widowed individuals participate. Bingo players come from all educational backgrounds, but with disproportionately fewer from both extremes (did not graduate from high school and college graduates).

Bingo players form a bi-modal distribution with respect to frequency of play. There is a small solid core of players who play at least once a week and a large majority who play less than once a month. Frequency of participation is not, however, the only variable which differentiates these two groups. They form two distinct groups with respect to sex, age, income, marital status, and education. In Table 7.2-2 bingo players who play once a week or more are designated as "heavy" players, those who play once a month, "medium" players, and those who play less than once a month, "light" players.

It is among the devotees of bingo (heavy players) that the stereotype of the bingo play appears. They are a small group of predominantly female players over 65 years of age with incomes under \$5,000 a year, the majority of whom are not high school graduates. While Table 7.2-2 clearly shows

Table 7.2-3

Bingo Attendance vs Bingo Players

	<u>Sample Composition</u> %	<u>Bingo Players</u> %	<u>Bingo Attendance</u> %
<u>Sex</u>			
Male	46	40	19
Female	54	60	81
<u>Age</u>			
18-24	14	20	21
25-44	43	48	49
45-64	31	27	25
65 and over	12	5	5
<u>Marital Status</u>			
Married	75	72	65
Divorced, separated	7	10	15
Never married	11	14	13
Widowed	7	4	7
<u>Income</u>			
Under \$5,000	13	6	10
\$5,000-\$10,000	18	18	10
\$10,000-\$15,000	22	24	36
\$15,000 and over	41	45	41
DK/NA	6	7	3

Table 7.2-4

Bingo Participation
by Ethnic Origin and Religious Background

Total sample	19%
<u>Ethnic Origin</u>	
Italian	29
East European	28
African	23
British	15
Spanish speaking	14
<u>Religious Background</u>	
Catholic	29
Protestant	16
Jewish	11
No religion	3

Table 7.3

Who Runs The Bingo Games

Games are run by	Total Sample	States-Bingo Legal	States-Bingo Not Legal
Church or charity groups	50%	54%	43%
Commercial enterprises	2	2	3
Both charitable and commercial enterprises	13	17	7

where the stereotype comes from, the impact of that eight percent of players has been disproportionate, thereby obscuring the true picture of who plays bingo.

Table 7.2-3 measures total bingo attendance. In contrast to Table 7.2-1, which measures unweighted participation, it reveals what bingo attendance looks like, adding the weight of frequency. Measuring total attendance, the stereotype again is negated and the original, rather surprising picture of who plays bingo appears, i.e. the younger, more educated player belonging to a higher income group. The one departure is in the male-female element of the image. The high male participation rate noted in the analysis unweighted by frequency of play no longer holds. While many males play bingo, their infrequent participation makes them only a small part of attendance over a year's time.

Although bingo is played by people of all ages and backgrounds, the proportion of players is by no means uniform for all groups. We find above average participation among people of Italian, African, and European backgrounds, but below average participation among those of British and Spanish-speaking backgrounds. Among religious groups, only Catholics show more than average participation. Those reporting no religious background constitute the other extreme and rarely play bingo. (Table 7.2-4)

7.3 Who Runs the Bingo Games?

We noted that the second reason bingo is not associated with gambling is its association with church and charitable groups, but almost a fifth of the respondents living in states where bingo is legal, report games are

additionally run by commercial enterprises. This is reported by only half as many people living in states where it is not legal. (Table 7.3)

7.4 Expenditures and Revenue

Third, we have said bingo derives its "non-gambling" status from its non-association with "big money". That, too, seems to be a myth.

The average amount spent on a session of bingo is \$5.93. Taking the number of days each respondent played in 1974 and multiplying it by the amount spent per day, we find the average amount spent by a bingo player on bingo to be \$74.00 per year. Using these figures in the aggregate, an estimated expenditure per capita has been derived and projected to the United States population, arriving at an estimated handle of 1.7 billion dollars a year spent on bingo.

Let's put that in perspective; 1.7 billion dollars is 300 million dollars more than the total illegal handle on horse books, nine times the amount ventured on sports cards, and 600 million dollars more than is ventured on the numbers game. In fact, of all illegal games, only sports books take in more. In terms of legal commercial gambling it is only 22 percent of the parimutuel handle and 25 percent of the casino's handle, but it takes in two and a half times more than the lotteries do.

The image of bingo as "non-gambling" does not seem well deserved. It is a broad scale game of chance played commercially, generating half a million dollars on a handle of almost two billion dollars a year.

Sixty-three percent of people who played bingo in 1974 bingoed at least once. The average amount won in 1974 was somewhat less than \$24.

Comparing that number to the average amount bet in 1974, \$74.00, we can see that bingo like other forms of gambling is a losing proposition in the aggregate, but unlike other forms of gambling there is an instant positive reinforcement of winning since almost everybody wins sometime and, of course, some people do win more than they spend. This may be irrelevant since making money is not the prime reason people play bingo.

7.5 Reasons Why People Play Bingo

An overwhelming majority of those who play give reasons related to participating in the activity (good time, pass the time, challenge, excitement, etc.), while less than a quarter of those who play give money-related reasons. Of all games studied, bingo players mention money as a reason for playing less often than players of any other game of chance. (Table 7.5-1)

The individuals comprising the 23 percent of players who give money-related reasons for playing bingo can be said to form a homogeneous cluster characterized generally as urban in nature. They are mainly non-whites, those who are unemployed, people with incomes under \$5,000, those with African and Italian ancestry, and those of the Jewish faith. The divorced and separated groups also give the money-related reason "it's a chance to get rich" more often than others. Figure 7.5-1 illustrates who gives which activity-interest reasons for playing bingo. Considering both types of reasons, activity-related and money-related, the reasons for the strong appeal of bingo become apparent. Bingo provides different solutions for different needs without lessening its effect for others. It is at the same time an exciting and challenging activity for those who wish excitement; a safe,

Table 7.5-1

Reasons for Playing Bingo

Net activity-interest reasons	75%
Net money-related reasons	23%

Figure 7.5-1

Activity-Interest Reasons

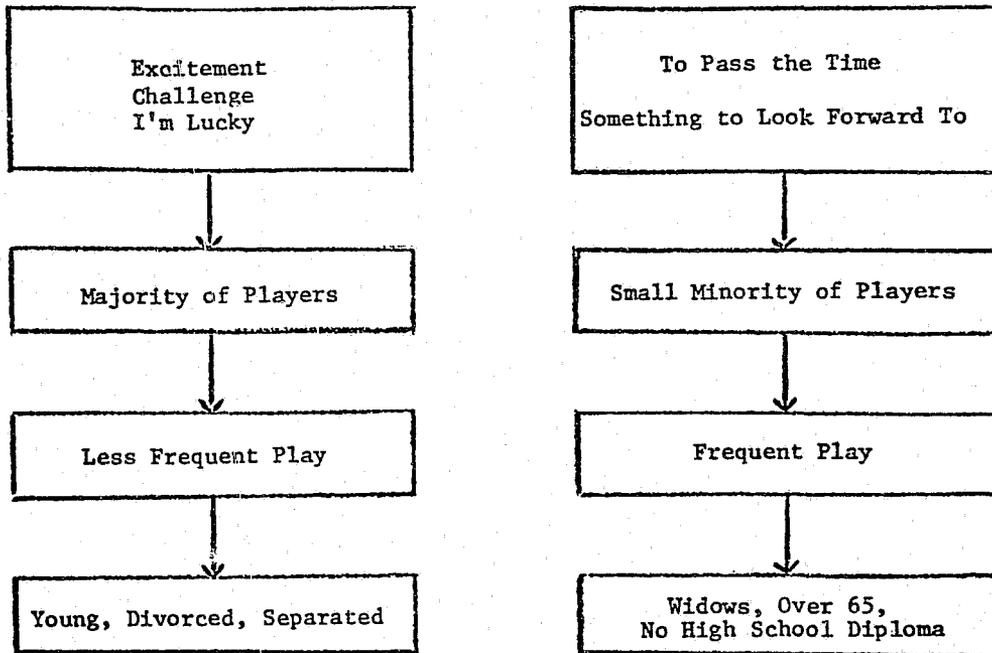


Table 7.5-2

Differential Profiles On Reasons Why People Play Bingo

Reason	Total %	Subgroups with significantly higher proportion responding to Reason			
		%		%	
<u>To have a good time</u>	62	Widowed	76	Methodist	70
		Non-whites	71	Female	68
		African ancestry	71	West	69
		Never married	70		
<u>To pass the time</u>	37	Italian ancestry	50	Widowed	43
		65 years and over	49	25-44 year olds	42
		Presbyterian	48	Spanish speaking ancestry	41
<u>Excitement</u>	27	18-24 year olds	49	\$5,000-\$10,000	36
		Widowed	46	West	33
		Unemployed	45		
<u>Challenge</u>	20	N. Central	27	18-24 year olds	26
		West	27		
<u>To make money</u>	19	African ancestry	50	Italian ancestry	28
		Unemployed	32	Non-whites	28
		Jewish	30	Large urban areas	27
		Under \$5,000	29		
<u>Something to look forward to</u>	14	Widowed	39	Not H.S. graduate	22
		65 and over	34		
<u>Friends play</u>	6	Jewish	14		
<u>Chance to get rich</u>	3	Divorced/separated	7		
<u>I'm lucky</u>	3	18-24 year olds	7	Divorced/separated	7
<u>Good cause</u>	2	Atheist	7	Widowed	5
		Italian ancestry	7	Methodist	4
		Jewish	5	Suburban	4
<u>Habit</u>	1	African ancestry	6		

Table 7.5-3

Reasons for Not Playing Bingo Given by Selected Subgroups
With Potential for Increased Participation

	Total Sample %	Spanish Speaking %	African %	\$5,000- \$10,000 %	Divorced, Separated %	Did not grad. H S. %
Not interested	72	43	60	57	44	63
Waste of time, effort	24	19	28*	12	13	10
Don't think about it	45	50	32*	50	51	41
Don't know about it	10	20	14	14	18	17
Not available	5	9	10	6	11	7
Don't want to disobey law/ Might get arrested	2	1*	9	2	7	4

Note: Columns do not add to 100 percent due to multiple responses.

*Exceptions to the general finding.

relatively inexpensive way to pass time for others, a way to make money, and above all provides a pleasant recreational activity for most of the players. (Table 7.5-2)

Let us now examine the other side of the question. What reasons do people give for not playing bingo, and which non-players are likely to participate if the availability of bingo is increased through modifications in the legal statutes. For the most part, "not interested" is the major reason given by people who do not play. Presumably if it is a matter of personal interest, the inclination to participate would not increase if bingo were suddenly readily available and legal. Similarly, those who consider bingo a waste of time, effort or money are unlikely to fill the bingo halls just because it is legal and available. There are, however, certain subgroups in the population who respond with disinterest less frequently and with neutral statements like "don't think about it," "don't know about it," "not available," and "not lawful," more often. (Table 7.5-3)

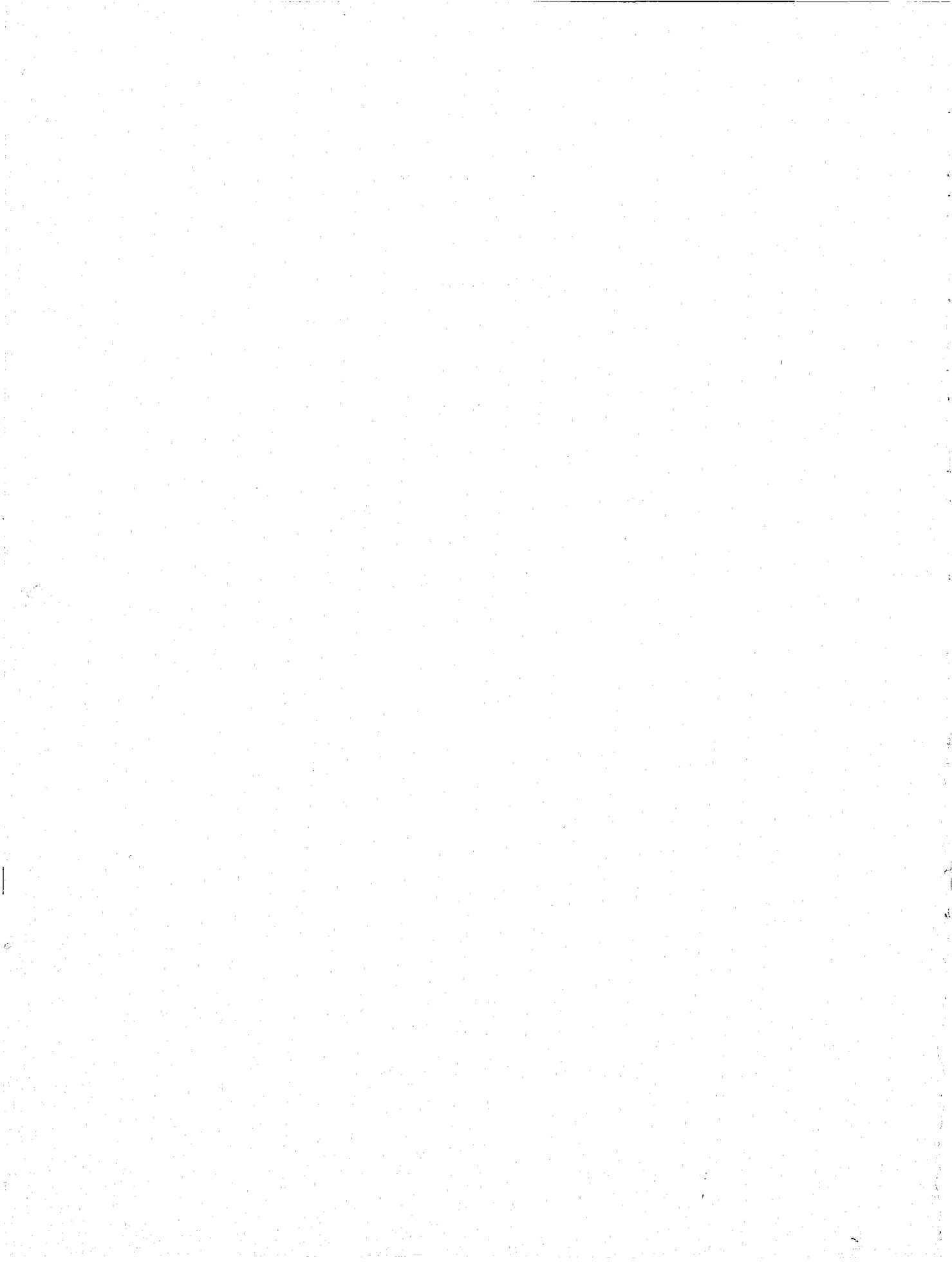
7.6 Exposure, Excitement, and Potential Participation

These groups, the spanish speaking, the black population, the divorced and separated and the low income and education groups, represent potential bingo players if revisions are made in the legal statutes regulating bingo which result in legalization and greater availability. There is additional evidence that these groups might be swayed. For the most part, they currently have only average exposure, which normally leads to participation, the probability increases that members of these groups will become bingo players. (Table 7.6-1)

Table 7.6-1

Bingo Excitement Ratings and Bingo Exposure
For Selected Subgroups with Potential for Increased Bingo Participation

	Total Sample	1974 Bingo Players	Spanish Speaking	African	\$5,000- \$10,000	Divorced, Separated	Did not grad. H.S.
Percent exposed to quite a lot of people who play bingo now	38%	66%	32%	52%	42%	37%	46%
Mean excitement rating for bingo	3.19	5.08	3.94	4.40	3.78	3.82	3.41



Whether or not it is desirable to promote participation in the Spanish speaking population, the black population, the divorced and separated groups, and the lowest education group, is a moral question, not a research question. The regressive nature of a bingo "tax" has been noted in chapter III.

Of greater interest and more importance is whether we can convert players of illegal games controlled by the rackets to bingo which is a presumably "clean" game, and hopefully could remain so. First of all, exposure to bingo is still somewhat lower for most illegal game players compared to bingo players so legalization and attendant availability may entice them to some degree. Second, illegal bettors already give higher excitement ratings for bingo than most bettors so they are not totally disinterested in the game.

(Table 7.6-2)

But, looking at the reasons they give for not playing bingo leads one to conclude that movement to bingo by illegal players does not seem promising except perhaps among numbers players. To convert numbers players to bingo, at the very least calls for a campaign about odds on numbers versus bingo.

(Table 7.6-3)

7.7 Bingo Players and Other Betting.

While a third of the bingo players engage in no other commercial betting activity, most bingo players do enjoy a variety of other betting activities. But, despite the fact that bingo players participate more heavily in commercial gambling than non-bettors, they do so less frequently than participants of other commercial gambling activities such as horse racing or sports betting.

Table 7.6-2

Bingo Excitement Ratings and Bingo Exposure
For Illegal Bettor Subgroups

	Total Sample	1974 Bingo Players	Illegal Bettors		
			Horses	Numbers	Sports
Percent exposed to quite a lot of people who play bingo now	38%	66%	51%	59%	44%
Mean excitement rating for bingo	3.19	5.08	3.73	3.90	3.48

Table 7.6-3

Reasons For Not Playing Bingo Given By
Illegal Bettor Subgroups*

Reason	Total Sample %	Illegal Bettors		
		Horses	Numbers	Sports
		%	%	%
Not interested	72	72	60	81
Waste of time/ effort	24	10	18	28
Don't think about it	45	53	47	31
Don't know about it	10	22	10	7
Not available	5	8	2	5
Odds against you	10	5	31	9

Note: Columns do not add to 100 percent due to multiple responses.

Bingo players also participate in illegal gambling activities, although their illegal participation while higher than the population as a whole is the lowest of all commercial bettor groups. All in all, 20 percent of the bingo players gambled through illegal channels in 1974 which is almost twice as high as the general population's illegal participation rate.

(Table 7.7)

7.8 Leisure Time Use

The emerging picture of the bingo player is certainly more like gamblers in general than non-gamblers in every way. In order to round out the picture let us look at how they spend their leisure time. In 12 of the top 14 ways people spent time in 1974, bingo players were more like gamblers than non-gamblers. (Table 7.8)

7.9 The Legal Status of Bingo

The legality of bingo is a fine distinction. Our respondents report you can get a bingo game for money almost as frequently in states that supposedly do not have legal bingo as in states where it is legal. In response to direct questioning on the legality of bingo, 44 percent of those living in states where it is not legal say they believe it is. This compares to 77 percent in states where it is legal. The level of favorability toward legalization of bingo is somewhat less in states where it is not legal, but there is still a positive majority favorable to legalization when you consider all respondents regardless of whether they believe the

Table 7.7

Bingo Players Participation In Other
Gambling Activities

	Bingo Players %	Total Sample %
<u>1974 Participation</u>		
Lottery	45	24
Horse track	28	14
Casino trips	18	10
Dog tracks	9	4
Sports, bookie or cards	7	4
Horses with a bookie	5	2
Numbers	5	3
Sports cards	5	3
Any illegal bet	20	11

Table 7.8

The Use of Leisure Time by Bingo Players,
Non-Bettors and Bettors

	Mean Days in 1974		
	Non- Bettors	Bingo Players	Bettors
Watch television	215	219	213
Read newspapers or magazines	181	223	227
Do nothing, nap, daydream	115	94	101
Read books	92	80	93
Home improvements, gardening	92	84	79
Socialize with friends and relatives	81	91	85
Church activities	77	55	43
Drink alcoholic beverages (except meals)	17	48	61
Active non-team sports	13	34	36
Fishing, hunting, camping	18	27	29
Arts and crafts	18	29	24
Attend sports events	13	31	22
Active team sports	9	25	23
Nightclubs, bars, dancing	6	29	26

game is legal or not.¹ Despite the lower favorability, more individuals in states where bingo is illegal say they would bet if it were legal than those in legal states who are not aware of its legality. One might think that individuals reporting bingo is legal where it is not would be referring to charitable games more than people reporting from states where it is legal, but that is not the case. As a matter of fact the difference in behavior between states with differing laws is just not significant, and differences in attendance and frequency of play do not always occur in the expected direction. (Table 7.9-1)

Although no one has formally suggested the format for legalization that bingo might take, one can assume that legalization might mean expanding commercial bingo to the states that currently have laws against it. We asked all respondents who had ever played bingo if there were commercial games, that is games run for private profit, would they play there? Approximately a third said they would. Of the 47 percent who say they would not, the primary reason given was disinterest in the activity itself, not some basic dislike of commercialism. However, eight percent did state the profit would be too high and 3 percent felt they would not trust a commercial game.

Current bingo players show greater willingness to engage in commercial bingo than others do (48 percent), and they are more concerned about the difference between charitable and commercial games in terms of larger profits.

1. See page 139 for a more complete discussion of attitudes toward legalization of bingo.

Table 7.9-1

Differential Behavior and Attitudes In States
Of Differing Legal Status

	States-Bingo Legal %	States-Bingo Not legal %
<u>Percent of those who</u>		
Believe it is legal	77	44
Believe it is not legal	16	41
Don't know if it is legal or not	7	15
Are positive to legalization	73	63
Are negative to legalization	15	27
Are unsure about legalization	9	7
Did not respond to questions about legalization	3	3
Don't think it's legal and who would bet if legal	22	28
Say games run by church or charity groups only	54	43
Played bingo in 1974	21	16
Are infrequent players (less than once a month)	78	72
Are occasional players (once a month)	18	15
Are frequent players (once a week or more)	4	13
Total days of attendance in 1974	52	48
Average daily expenditure per player	\$5.93	\$5.92

Table 7.9-2

Interest In Commercial Bingo by People
Who Have Ever Played Bingo

	Total %	States-Bingo Legal %	States-Bingo Not Legal %	1974 Bingo Players %
<u>If commercial bingo available, bingo players:</u>				
Would play	33	32	34	48
Would not play	47	49	44	50
Not ascertained	20	19	22	2
<u>Top 10 reasons why bingo players would not play commercial bingo:</u>				
Not interested	37	33	44	30
Profit too high	8	10	4	11
Waste of money	6	6	6	8
Other things to do	5	7	1	2
Waste of time/effort	4	4	5	2
Odds against you	3	1	5	2
Don't trust the game	3	1	5	4
It's wrong	2	2	*	1
Don't believe in it	2	2	1	2
Don't think about it	1	1	2	*

*Less than one half of one percent

Table 7.9-3
The Regulation Of Commercial Bingo

	States-Bingo Legal	States-Bingo Not Legal
<hr/>		
<u>Bingo Should Be Regulated By:</u>		
The Federal government	5%	7%
State Government	26	23
Local Government	40	37
Don't care	5	5
Don't know/no answer	24	28

As to who should regulate commercial bingo, more respondents said it should be regulated by their local government. Their state government was second choice, and only very few felt the federal government should regulate it. (Table 7.9-3)

Bingo is a widespread game, with a large base of players, which generates a large dollar volume. In many areas a majority favor its legalization, and it would seem to offer an opportunity for revenue generation by local government

CHAPTER EIGHT

LOTTERIES

Second to parimutuel betting on horses, lotteries are the most widely available form of legal gambling in the United States. At the time of this writing, legal lotteries are available in 12 states, compared to legal betting on horse racing in 30 states. In states where it is legal, it is much easier to buy a lottery ticket than to travel to the racetrack to bet on the horses. This availability, combined with the lower cost, is probably a large factor in accounting for the higher proportion of respondents (48 percent) who buy lottery tickets where it is legal to do so compared to the proportion (16 percent) who bet on the horses in states where it is legal.

Thirty percent of the sample reported having bought a lottery ticket at some time in their life, and 24 percent, which projects to 34.6 million people, reported doing so in 1974. The average amount spent on lottery tickets by participants in 1974 was twenty-four dollars. Twenty percent of the participants reported having winning tickets in 1974, and the average amount won by those with winning tickets was approximately sixty dollars. Multiplying the per capita annual bet by 144.1 million people results in a total amount bet in 1974 of 639 million dollars. The official published figure of legal lottery handle in the United States is 681 million dollars, indicating that the interview data are within 6.6 percent. The average take-out from state lotteries is 55 percent, which means

that Americans spent (i.e., lost) approximately 374 million dollars on legal lotteries in 1974.

8.1 Participation in Lotteries

Lotteries are a great leveler of demographic differences in betting behavior. Compared to illegal betting and betting on the horses at the track, which draw most of their participants from young to middle-aged males, lottery participation is common to all groups. The biggest demographic difference in lottery participation is the area in which one lives. The legal lotteries are presently concentrated in the Northeastern and North Central United States, and as a result participation in the South and West is almost non-existent by comparison.

Other differences are noted, in spite of the general leveling effect. Nationally, nine percent more men than women bought a lottery ticket in 1974. Participation rates are also proportionately higher among whites and in the suburbs. The participation rate among those of Italian and East European descent is substantially higher than among those of other ethnic backgrounds. Jewish and Catholic respondents said they participated in lotteries more extensively than respondents with other religious preferences. Respondents between the ages of 25 and 64 participate proportionately more than do those under 25 or over 64. Participation rates of different marital status groups are not the same as in most forms of gambling. Over all other types of betting, single respondents (excluding the widowed) show higher rates of activity. With respect to lotteries, however, married respondents participate almost at the same rate as the never married, and to a greater extent than the divorced or separated. Widowed people, as with

Table 8.1-1
 Distribution of 1974 Lottery
 Participation by Demographic Characteristics

	1974 Lottery Participation %
<u>Total sample</u>	24
<u>Sex</u>	
Male	29
Female	20
<u>Race</u>	
White	25
Non-white	19
<u>Region</u>	
Northeast	55
North central	32
South	6
West	3
<u>Distance from 25 largest cities</u>	
24 miles or less (urban)	28
25-49 miles (suburban)	39
50 miles or more (non-urban)	19
<u>Ethnic background</u>	
Italian	50
East European	46
African	27
West European	24
British	24
Spanish-speaking	22
Irish	21
Other	14
<u>Religious Preference</u>	
Jewish	52
Catholic and orthodox	38
All Protestant combined	18
Atheist, agnostic, no preference	13
<u>Age</u>	
18-24 years	17
25-44 years	30
45-64 years	25
65 and over	10
<u>Marital status</u>	
Never married	28
Married	26
Divorced or separated	21
Widowed	3
<u>Education</u>	
Less than high school	18
High school	26
Some college	26
College graduate	31

other forms of gambling, evidence a much lower participation rate. (Table 8.1-1)

There is a strong and positive relationship between both family income and education and participation in lotteries. A third of those with a family income of \$15,000 or more bought a lottery ticket in 1974, and almost a third of the college graduates did so. The percent of family income spent on lotteries, however, declines progressively as income increases. If the generation of state revenue through state operated lotteries is regarded as a form of taxation, it is hence a regressive tax. (Table 8.1-2)¹

Almost three fourths of the 1974 lottery participants said they bought tickets in their own state. An additional 13 percent bought tickets both in their own and in another state.

Lottery clubs are an innovation engaged in by six percent of the lottery players, although only two percent participate exclusively through group purchases. The vast majority of lottery players, 92 percent, make only individual purchases. (Table 8.1-3)

8.2 Leisure Time Use and Lottery Participation

As is the case with those who engage in other forms of betting, lottery participants present a picture of greater activity level. The activities which they engage in less frequently than other bettors are: visiting with friends, watching TV, and church-related activities. The activities which they engage in more often than other bettors are: community activities, attending movies or the theater, going to nightclubs or

¹See chapter 3 for further discussion of regressivity.

Table 8.1-2

Distribution of 1974 Lottery Participation and
Mean Percent of Family Income Spent on Lotteries

	1974 Lottery Participation %	Mean % of Family Income Spent on Lotteries in 1974 %
Total sample	24	0.05
<u>Income</u>		
Under \$5,000	10	0.08
\$5,000-10,000	15	0.07
\$10,000-15,000	24	0.05
\$15,000 and over	33	0.02

Table 8.1-3

Patterns of Lottery Ticket Purchases

	1974 Lottery Players %
Bought tickets in own state in 1974	74
Bought tickets in another state in 1974	13
Bought tickets both in own and another state in 1974	<u>13</u>
	100
Purchased tickets only by oneself in 1974	92
Made purchases only with group in 1974	2
Purchased both by self and with group in 1974	<u>6</u>
	100

Table 8.2-1

Mean Number of Days Per Year on Leisure Activities

	1974 Non Bettors	1974 Bettors	1974 Lottery Participants
Watch television	215	213	195
Read newspapers or magazines	181	227	232
Do nothing, nap, daydream	115	100	124
Read books	92	93	107
Home improvements, gardening	92	79	78
Socialize with friends and relatives	81	85	78
Church or related activities	77	43	30
Knitting, sewing, etc.	59	38	38
Fishing, hunting, camping, etc.	18	29	25
Arts and crafts	18	24	24
Drink alcoholic beverages (except meals)	17	61	62
Community activities	15	17	21
Active non-team sports	13	36	32
Attend sports events	13	22	22
Active team sports	9	23	21
Movies or theatre	7	17	27
Nightclubs, bars, dancing	6	26	44
Operas, lectures, museums	6	7	9

Table 8.2-2

Recreation and Vacation Expenditures

	1974 Non-bettors %	1974 Bettors %	1974 Lottery Participants %
<u>Amount spent on recreation per week in 1974</u>			
Less than \$5	53	17	12
\$5-\$9	16	23	22
\$10-\$14	13	17	18
\$15-\$24	12	21	24
\$25 and over	6	22	24
<u>Amount spent on vacation in 1974</u>			
No vacation	36	14	13
Spent nothing	2	1	2
Less than \$100	20	13	9
\$100-\$299	14	18	20
\$300-\$499	10	16	14
\$500-\$749	7	14	16
\$750 and over	11	24	26
Mean vacation days, 1974	15 days	19 days	18 days

bars and reading. The average number of days per year that lottery participants consume alcoholic beverages, other than with meals, is three to four times greater than that of non-bettors. Lottery participants, like other bettors, also spent more money on recreation and vacations than non-bettors. Compared to non-bettors, four times as many lottery participants spent over 25 dollars a week on recreation and over twice as many lottery participants spent over 750 dollars on vacation in 1974. (Tables 8.2-1 and 2)

As was seen elsewhere in this report non-bettors also are characterized by fewer financial resources than bettors. Part of the generalized picture of a greater activity level on the part of bettors of any sort may be economically related. Bettors tend to be younger and more affluent and hence are more active and are greater consumers of resources and seekers of recreation of all sorts, including gambling. People who buy lottery tickets do not differ from other bettors in these respects.

8.3 Lottery Participation and Other Betting

Participants in most other forms of gambling, whether legal or illegal, were found to participate to a greater extent in all forms of gambling than the general population. Although this generalization holds for lottery participants as a group, the differences between lottery players and the general population are not overwhelming with respect to all types of gambling. The primary form of gambling on which lottery participants resemble the general population more than the bettor population is participation in casino games. With respect to other legal games, lottery participants are more heavily represented only in bingo play, but they are more heavily involved in all forms of illegal betting, (Table 8.3)

Table 8.3
 Lottery Participation and Other Forms of
 Legal and Illegal Betting

	Total Sample %	1974 Bettors %	1974 Lottery Participants %
<u>Legal Gambling Activity</u>			
Sports with friends	28	46	43
Bingo	19	31	35
Horse races	15	23	25
Casinos	10	16	11
Dog races	4	6	5
<u>Illegal gambling activity</u>			
Any illegal outlet	11	18	23
Illegal sports bets	4	6	9
Numbers	3	5	8
Illegal horse bets	2	4	5

Table 8.4
 Exposure to Lottery Participation and Extent of
 1974 Lottery Participation

	Total Sample %	Non Bettors %	1974 Bettors %	1974 Lottery Participants %
<u>People known as a child who bought lottery tickets</u>				
Most people/quite a lot	11	4	14	17
A few/practically nobody	89	96	85	83
No answer	0	0	1	0
<u>People known now who buy lottery tickets</u>				
Most people/quite a lot	37	18	49	80
A few/practically nobody	62	82	50	18
No answer	1	0	1	2

8.4 Exposure to Lottery Participation

Exposure to specific gambling activities is highly related to participation in gambling activities. This is the case both for exposure as a child and current exposure. Exposure to lottery purchases, at least legal state sponsored purchases, as a child was not possible except for the very young or very old members of the population. The Louisiana State Lottery, the last of the early United States lotteries, ceased to function in 1895 when Congress passed a law prohibiting advertisement of lotteries and traffic in lottery tickets. There were no operational state lotteries between then and 1964, when New Hampshire established a legal state lottery, followed by New York in 1967 and ten other states in the 1970's. In addition to the mixed effects of age and exposure as a child, the region one lived in as a child is confounded with exposure. As has been mentioned, the lotteries are presently concentrated in the Northeast and North Central United States.

In spite of the restrictions placed on the possibility of exposure by generational and regional differences, a slight relationship between childhood exposure and lottery participation still occurs. Thirteen percent more of those who are current lottery participants say they were exposed to lotteries as a child than is the case among non-bettors. Current exposure to lotteries is twice as great among lottery participants compared to non-bettors. (Table 8.4)

8.5 Legalization of Gambling and Lottery Participation

Legalization of other types of gambling does not appear to have any profound effect on lottery participation. A smaller percentage of people

Table 8.5

Percent of People Participating
in Lotteries by Types of Legal Gambling Available

Forms of Legal Gambling Available	1974 Lottery Participants %
Total sample	24
None	9
Horse or dog races	3
Horse or dog races and lotteries	49
Horse or dog races, lotteries and other	56

Table 8.6

Convenience of Purchasing Lottery Tickets

	Total Sample %	Non Bettors %	1974 Bettors %	1974 Lottery Participants %
Can buy lots of places	47	22	49	85
A little inconvenient	4	2	5	5
Inconvenient	6	6	6	4
Impossible	24	27	24	6
Don't know	19	43	16	0

buy lottery tickets in states where horse or dog races, but not lotteries, are legal than in states with no legal forms of gambling. Once lotteries are added to the legal games, however, the percentages participating jumps dramatically. This is only natural, since purchases become much easier to make. There is also an increase in lottery participation when some other type of legal gambling is added to races and lotteries, but this is very likely a regional effect inasmuch as only New York and New Jersey fit into this category. (Table 8.5)

8.6 Convenience

As would be expected, the convenience of making lottery ticket purchases is highly related to lottery participation. Of all those who purchased a lottery ticket in 1974, 85 percent said it was possible to purchase tickets in "a lot of places," and only 10 percent said it was either inconvenient or impossible to buy tickets locally. Among the total bettor sample, on the other hand, only 49 percent said lottery tickets could be purchased in "lots of places" and 30 percent said it was inconvenient or impossible. An additional 16 percent of this group didn't know where lottery tickets could be purchased. The difference is even more striking among non-bettors. Only 22 percent of the non-bettor group said lottery ticket outlets were abundant, while 33 percent said it was either inconvenient or impossible to buy a ticket and 43 percent didn't know where tickets could be purchased. (Table 8.6)

8.7 Luck and Skill

In the analysis of other forms of betting behavior we found that a large majority of the bettors have a realistic perception of the amount of

Table 8.7
Perception of Lottery Betting as Luck or Skill

	Total Sample %	Non Bettors %	1974 Bettors %	1974 Lottery Participants %
Almost all luck/more luck than skill	82	65	92	94
Equal amounts of luck and skill	4	6	4	4
Almost all skill/more skill than luck	3	5	1	1
Don't know	10	23	3	1
No answer	1	1	0	0

Table 8.8
Mean Ratings of How Often Lotteries
Are Fixed*

Total Sample	Non Bettors	1974 Bettors	1974 Lottery Participants
3.55	2.97	3.81	4.37

*Scale: 1 = fixed most of the time, 2 = fixed
pretty often, 3 = fixed sometimes, 4 =
almost never fixed, 5 = never fixed.

Table 8.9
Mean Excitement Ratings for Lotteries*

Total Sample	Non Bettors	1974 Bettors	1974 Lottery Participants
2.80	2.65	3.26	4.11

*Scale: 1 = not at all exciting; 8 = very exciting

chance involved in the game. Lottery participants are no exception. All but six percent of those who bought lottery tickets realized that chance played at least a large part in winning anything on a lottery. This proportion is approximately equal to the proportion of both non-bettors and the total population who either say that chance is a major element or that they don't know. (Table 8.7)

8.8 Perception of "Fixes"

Compared to other games, lotteries are rated closer to honest but many believe lotteries are sometimes fixed. As with other games, thebettors have a more favorable impression than do those who do not bet on the game. People in general, as well asbettors, believe the lotteries are less likely to be fixed than the illegal numbers game. (Table 8.8)

8.9 Ratings of Excitement

In general, people who bet on a given activity think that the activity is more exciting than people who do not bet on it. Again, lotteries are no exception. Those who bought lottery tickets in 1974 rated lotteries as significantly more exciting than the non-bettors but even those who bet on the lotteries rate it below the midpoint of the excitement scale. (Table 8.9) Comparing excitement ratings for lotteries with excitement ratings for numbers shows that the difference between non-bettors andbettors is even greater on the numbers game. Non-numbersbettors regard betting on the numbers as an even greater bore than buying lottery tickets, but numbersbettors regard their game as more exciting than lottery players regard theirs.

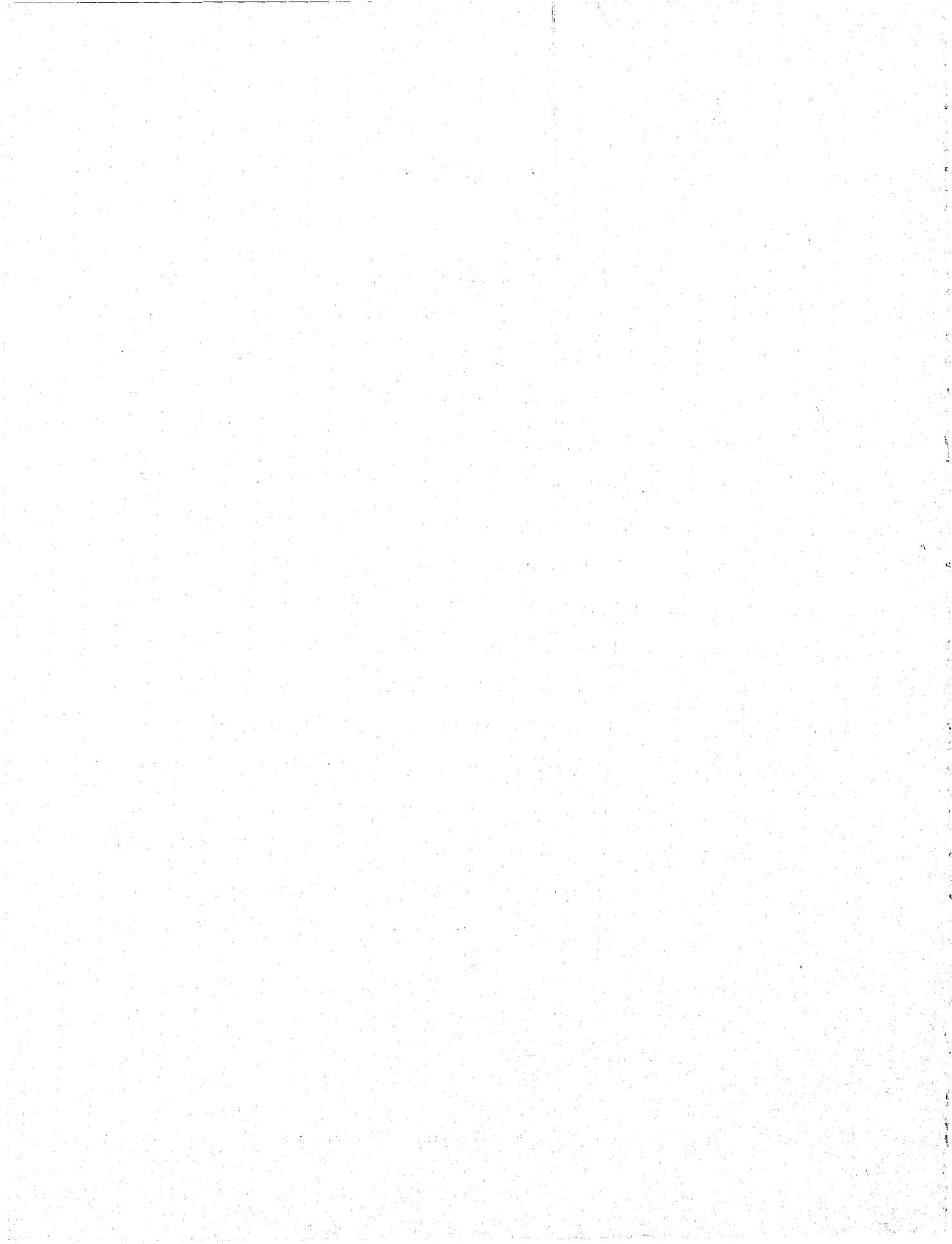


Table 8.10

Means of Expressed Needs and Need Fulfillment and Lottery Participation*

	Mean Need ^a				Need Fulfillment ^b			
	Total Sample	Non Bettors	1974 Bettors	1974 Lottery Participants	Total Sample	Non Bettors	1974 Bettors	1974 Lottery Participants
Control over own life	5.85	5.45	6.11	5.99	-40	-32	-45	-60
Close, comfortable relationships	5.81	5.59	5.95	5.90	-3	-6	-1	+6
Interesting things to do	5.76	5.34	6.03	5.98	-50	-34	-60	-56
Well mannered associates	5.75	5.51	5.90	5.92	-23	-27	-20	-16
Things to look forward to	5.73	5.43	5.92	5.74	-9	-2	-13	+3
Success	5.41	5.04	5.65	5.65	-35	-38	-32	-22
Money	5.19	4.80	5.44	5.40	-112	-113	-112	-99
Chances to get ahead	5.09	4.69	5.35	5.37	-54	-63	-48	-43
Savings	5.03	4.68	5.25	5.29	-147	-144	-149	-149
Challenges	4.96	4.29	5.39	5.40	-19	-12	-24	-23
Time for recreation	4.82	4.23	5.20	5.24	-33	-8	-49	-82
Hard work	4.47	4.40	4.51	4.41	+107	+79	+125	+122
Luck	3.99	3.61	4.23	4.14	-16	-8	-21	-7
Excitement	3.71	2.89	4.24	3.93	+62	+89	+44	+74
Power	3.17	2.85	3.38	3.33	+1	+2	0	+19

*Note: Positive values indicate that people say they have more than the need; negative values indicate they need more than they have.

^aSee pages 55 and 56 of Appendix D: Questionnaire. Scale: 1(not at all ___) to 8(very ___).

^bDerived by subtracting "need" from "have" scores and multiplied by 10 for ease of presentation.

8.10 Needs

Lottery participants more nearly resemble the total bettor population than the general population in the level of expressed needs. In contrast to people who bet on sports, horses, and numbers, however, lottery participants do not express a higher need level than the total population for such things as excitement, money, challenges, and chances to get ahead. The pattern of need fulfillment for lottery participants is also similar to those of the total bettor sample. The pattern of needs and need fulfillment for lottery participants thus also places them among "real" bettors. (Table 8.10)

8.11 Attitudes towards Legalization

A majority of the population say they are favorable to the legalization of lotteries. This majority is attained by virtue of 77 percent stating they would like to see the lottery continue in states where lotteries are already legal. In the South where there are few lotteries already established, more people are opposed to than in favor of the legalization of state lotteries. The opposition to state lotteries does not have a majority either. Those groups which tend to oppose legal lotteries are: the lowest income level, the widowed, those with less than a high school education, and people over 65. The non-urban areas have a bare majority favoring legal lotteries. One point of interest is that the subgroups which do not favor legal lotteries do not have a majority opposed to legal lotteries because there is a greater percentage in these groups, than in others, who are either unsure or who did not answer the question. (Table 8.11-1) Although 49 percent of the sample living in states where lotteries are not

Table 8.11-1
 Demographic Characteristics
 and Attitudes Towards Legalization of Lotteries

	Positive to Legalization %	Negative to Legalization %	Unsure %	No Answer %	Total Sample %
Total sample	61	29	6	4	100
<u>Currently legal</u>					
Yes	77	14	7	2	100
No	49	41	5	5	100
<u>Geographic Region</u>					
Northeast	84	8	7	1	100
North central	68	22	8	2	100
South	37	49	6	8	100
West	62	33	3	2	100
<u>Income</u>					
Less than \$5,000	38	46	12	4	100
\$5,000-10,000	53	33	8	6	100
\$10,000-15,000	66	25	5	4	100
\$15,000 and over	71	24	4	1	100
<u>Marital status</u>					
Married	62	29	6	3	100
Divorced/separated	69	23	6	2	100
Widowed	36	39	16	9	100
Never married	69	24	5	2	100
<u>Education</u>					
Less than high school	45	38	10	7	100
High school	66	27	4	3	100
Some college	73	22	5	0	100
College degree	72	22	4	2	100
<u>Age</u>					
18-24 years	64	28	4	4	100
25-44 years	69	23	6	2	100
45-64 years	61	30	6	3	100
65 and over	34	50	10	6	100
<u>Distance from largest 25 cities</u>					
Less than 25 miles	72	20	6	2	100
25-49 miles	80	14	6	0	100
50 miles or more	51	38	6	5	100

legal say they favor the legalization of lotteries, only 28 percent say they would purchase tickets if it were legal to do so. (Table 8.11-2)

Very few people say they are in favor of establishing legal lotteries at the national or local levels in addition to or instead of state lotteries, although a national lottery receives somewhat more support than a local lottery. Very few people would like to see the state lottery replaced by a national or local game. In states where lotteries are not legal, the response to a national lottery is more varied. Thirty-seven percent of the people in these states say they would like to see a national lottery in addition to state lotteries and 35 percent are not in favor of a national lottery. Over one fifth of the people living in states where lotteries are not legal say they don't know or don't care whether national or local lotteries are legalized. Presumably this reflects a lack of information and/or concern about lotteries in these states. (Table 8.11-3)

Lottery participants generally perceive more positive than negative consequences attached to the legalization of lotteries. A majority of those who bought lottery tickets in 1974 think the legalization of lotteries results in more money to run the government, more jobs for people, and more of a chance for the common man to get rich. A large minority believe that legal lotteries result in less money for legalized crime.

The primary negative consequence of legal lotteries which is seen as possible by lottery participants is the possibility that more children will be influenced to gamble. A large minority also believe that legal lotteries result in people gambling more than they can afford, and about a third believe racketeers are connected to legal lotteries. Thirteen percent believe

Table 8.11-2

Willingness to Participate in Legal Lotteries

	States Where Lotteries Are Not Legal %
Would bet	28
Would not bet	62
Don't know	1
No answer	9
	<u>100%</u>

Table 8.11-3

Attitudes Towards National or Local Lotteries

	Total Sample %	States Where Lotteries are Legal %	States Where Lotteries are Not Legal %
<u>Favor national lottery instead of/ in addition to state lottery</u>			
Instead of	1	1	2
In addition to	22	19	37
Not in favor	62	67	35
Don't know/don't care	5	5	5
No answer	10	8	21
<u>Favor local lottery instead of? in addition to state lottery</u>			
Instead of	4	4	3
In addition to	15	14	19
Not in favor	67	69	54
Don't know/don't care	5	6	2
No answer	9	7	22

Table 8.11-4

Perceived Consequences of
Legalization of Lotteries

	Random Subset of Bettors %
<u>Positive Consequences</u>	
A lot more money to run the government	65
More jobs for people	57
More of a chance for the common man to get rich	56
Less money for organized crime	47
<u>Negative Consequences</u>	
More of a chance that children will be influenced to gamble	48
More people gambling more than they can afford	42
More racketeers connected with it	31
More people working less because they are gambling	13

Table 8.12
Reasons People Give for Buying or Not Buying
Lottery Tickets*

	Total Sample %	States Where Lotteries are Legal %	States Where Lotteries are Not Legal %
<u>Reasons given for buying tickets^a</u>			
Activity related	82	82	83
Money related	77	79	62
<u>Reasons given for not buying tickets^b</u>			
Activity related	68	79	64
Money related	46	61	42
Legal consequences	16	1	20
Moral reasons	9	9	9
Social consequences	2	3	2

*Notes: Columns do not sum to 100 percent due to multiple responses.

^a Respondents chose one, two, or three reasons from a list of 11 reasons provided.

^b Respondents chose one, two, or three reasons from a list of 18 reasons provided.

that people will work less due to gambling. (Table 8.11-4)

8.12 Reasons People Give for Buying or Not Buying Lottery Tickets

When asked why they buy lottery tickets, people give both interest in the activity and money-related reasons almost as frequently. The single most frequently given reason, however, was "to make money." When those who did not buy lottery tickets were asked why they did not, reasons such as "don't think about it" or "I don't know anything about it" were more frequently mentioned. Money-related reasons such as "It's a waste of money" or "I don't want to lose money" were second most frequently mentioned. People seldom expressed concern about possible moral and/or social ramifications of buying lottery tickets, but 20 percent of the people living in states where lotteries are not legal said they did not buy lottery tickets because of possible legal consequences (e.g., "I might get arrested"). (Table 8.12)

CHAPTER NINE

SPORTS BETTING

Betting on sports events is by no means a modern phenomenon. There are records of betting one's wife or even one's life on the outcome of games in ancient civilizations. Americans seem to be particularly sports-minded. A great deal of time and money are spent by sports fans, but there is a controversy about legalizing sports betting. On one side are those who believe legalization would lead to corruption of the athletes and spoil the games, making the fans the ultimate losers, even if they are merely observers rather than bettors. On the other side proponents of legalized gambling argue that legalization would make illegal betting operations less profitable and, consequently, the corruption of athletes as well as public officials would no longer be a problem.

It is not the purpose of this report to attempt to prove or disprove the arguments put forth by either the proponents or the opponents of legalized sports betting, but to provide data on the betting behavior and attitudes of the American public with the hope that this knowledge will provide a better basis for decision-making.

9.1 Participation in Sports Betting

Thirty-six percent of our sample of people 18 years of age and over say they have bet on sports in some form or another in their lifetime. Nineteen percent of the sample have bet on college sports.

In 1974, 28 percent of our sample, which projects to about 40.4 million people, placed a bet on a sports event. Twenty-six percent,

Table 9.1-1

Percentage of Respondents Who Reported
Betting On Sports With Friends in 1974

Sport	Total Sample %
Any sports bet	
Professional football	20
Professional baseball	18
College football	11
Fights or wrestling	8
Professional basketball	6
College basketball	5
Tennis or golf	5
Hockey	2
College baseball	1

Table 9.1-2

Percentage of Respondents Who Reported
Illegal Sports Betting in 1974

Type of Bet	Total Sample %
Any illegal sports bet	4
Sports cards	3
Bookie bets other than sports cards	2
Professional football with bookies	2
College football with bookies	1
Professional baseball with bookies	1
Professional basketball with bookies	.5
College basketball with bookies	.4
Hockey with bookies	.3
College baseball with bookies	.1
Tennis or golf with bookies	*

*Less than .05 percent

representing 37.5 million, bet on professional sports while 17 percent, approximately 24.5 million people, placed a bet on a college sports event. An overwhelming majority of sports bettors bet with friends. Slightly less than four percent of the population placed an illegal sports bet in 1974. This projects to 5.6 million adults in the United States. These 5.6 million people yield an estimated annual handle of 2.5 billion dollars bet illegally on sports. Of this 2.5 billion, 191 million was bet on sports cards, where the take-out rate was approximately 60 percent, or 114.6 million dollars. Another 2.3 billion was bet with bookies, where the take-out rate was only 4.5 percent, or 105 million. Consequently, Americans spent (lost) approximately 220 million dollars betting illegally on sports in 1974.

Table 9.1-1 shows the relative popularity of the various sports as indicated by the percent of the total sample who report betting on the games with friends. Football is the most popular sport. One fifth of the respondents said they bet on professional football and 11 percent said they bet on college football. Professional baseball is also a popular bet among friends (18 percent) while college baseball and college basketball are less popular. Eight percent say they bet on fights or (surprisingly) on wrestling.

Table 9.1-2 shows the pattern for betting on different sports with a bookie. Professional football was also the most popular sports event for betting with a bookie; two percent say they placed a bet on at least one professional football game with a bookie in 1974. One percent said they bet on college football with a bookie. Three percent reported placing

Table 9.1-3

Sports Betting by Demographic Variables

	1974 Sports Betting	
	Total %	Illegal %
Total Population	28	4.
<u>Sex</u>		
Male	42	8
Female	16	0.4
<u>Age</u>		
18-24	40	4
25-44	35	5
45-64	21	3
65 and over	4	0.1
<u>Region</u>		
West	36	2
Northeast	32	6
North central	30	5
South	18	3
<u>Race</u>		
White	29	4
Non-white	22	2
<u>Ethnic Background</u>		
West European	34	5
East European	33	6
Spanish speaking	33	3
Irish	32	6
British	31	3
Italian	25	8
African	24	0.3
Other	17	2
<u>Education</u>		
Less than high school	14	2
High school	28	3
Some college	40	6
College graduate	41	6
<u>Marital status</u>		
Never married	38	5
Divorced/separated	35	5
Married	28	4
Widowed	3	0
<u>Distance from 25 largest urban areas</u>		
24 miles or less (urban)	29	4
25-49 miles (suburban)	38	4
50 miles or more (non-urban)	25	4
<u>Religious preference</u>		
Jewish	39	8
Catholic and orthodox	30	6
All Protestant combined	27	3
Protestant Bible-oriented sects	13	2
Atheist, agnostic, or no preference	22	1

sports cards bets, while two percent placed sports bets with bookies.

There are important regional differences in sports betting in the United States. Sports betting among friends is most prominent in the West, while sports betting with a bookie or on sports cards is least prominent there. The Northeast and North Central regions are strongholds of sports betting. Illegal sports betting is most prevalent in the Northeast with almost 6.4 percent engaging in it. Sports betting of any kind is not widespread in the South. Betting on sports is primarily a male phenomenon with two and a half times more men than women betting on sports, and twenty times more men than women betting on sports illegally. Proportionately more whites than non-whites bet on sports---both legally and illegally. Sports betting is highly age-related. There is a steady decline in the percentage of people who bet as age increases. With respect to illegal sports betting in 1974, there is a small peak in the 25-44 year old range, although again betting decreases among older groups. Education is similarly related to sports betting. Participation increases as education increases, leveling at 40 percent for those who go to college.

An additional demographic variable which differentiates sports bettors is marital status. Single people, with the exception of the widowed, bet on sports more than those who are married.

Betting on sports is not exclusively an urban phenomenon even though total sports betting is highest in the suburban ring 25 to 49 miles away from the 25 largest cities in the United States, and lowest in the non-urban areas. Illegal sports betting occurs with almost equal prevalence in urban, suburban, and non-urban areas.

Table 9.1-4

Relationship Between Income and Sports Betting

Income	1974 Sports Betting		Mean Percent of Family Income Bet Illegally on Sports in 1974
	Total %	Illegal %	
Total population	28.	4.	0.08
Under \$5,000	10	0.2	0.02
\$5,000-\$10,000	20	2	0.03
\$10,000-\$15,000	26	4	0.05
Over \$15,000	40	7	0.15

Table 9.1-5

Convenience and Availability of Illegal Sports Betting
And Illegal Betting Participation*

How Illegal Sports Bets Can Be Placed	1974 Illegal Sports Bettors %	1974 Non-Bettors %
By phone	80	33
Where they work or live	58	14
Near where they work or live	45	10
Somewhere else easy to get to	35	15
Somewhere else hard to get to	8	4
Can't be done in area	6	14
Don't know	6	39

*Note: Columns do not sum to 100 percent due to multiple responses.

Sports betting varies widely with religious preference. Jewish respondents had the highest participation rates with 39 percent reporting that they bet on sports in 1974. Not surprisingly the lowest participation rates occurred among members of Protestant Bible-oriented sects. Considering only illegal forms of betting, again the highest participation rates occurred among Jewish respondents; but interestingly atheists and agnostics and those raised with no religious preference bet illegally even less than members of Bible-oriented sects. (Table 9.1-3)

Betting on sports, whether legally or illegally, is also related to family income. As family income increases, the proportion of people betting on sports increases. Further, as family income increases, the mean proportion of family income ventured on sports betting increases. Although taxes levied on legalized betting of other types would be a regressive tax affecting lower income groups more than higher income groups the inverse is true of sports betting. A tax on sports betting would, in fact, be progressive. (Table 9.1-4)

The reported convenience of betting on sports with a bookie is highly related to participation. Eighty percent of those who placed an illegal sports bet in 1974 said such bets could be placed by phone. Over half of the people who bet illegally on sports in 1974 said they could do so at their residence or their place of work, and nearly half said illegal sports bets could be placed near their residence or place of work. This compares to a third of the people who had placed a bet in their lifetime, but did not bet on sports in 1974, who said illegal sports bets could be placed by phone, and less than 15 percent who said that it was possible at or near their residence or job. (Table 9.1-5)

Table 9.2-1
Patterns of Leisure Time Use and Sports Betting

	Mean Number of Days in 1974			
	Total Sample	1974 Non-Bettors	All 1974 Sports Bettors	Illegal 1974 Sports Bettors
Watch television	213	215	206	196
Read newspapers or magazines	209	181	235	252
Nap/daydream	106	115	112	101
Read books	93	92	89	76
Home improvements	84	92	70	43
Seeing friends	84	81	89	67
Church activities	57	78	33	33
Sewing, knitting	46	59	24	13
Drink alcoholic beverages (except with meals)	44	17	83	109
Active non-team sports	27	13	42	51
Fishing/hunting	25	18	36	47
Arts and crafts	21	18	19	14
Attend sports events	19	13	27	41
Active team sports	18	9	33	49
Nightclubs/bars/dancing	18	6	34	34
Community activities	17	15	18	27
Movies or theater	13	8	17	20
Opera, lectures, museums	7	6	24	13

9.2 Leisure Time Use and Attendance at Games

The mean number of days spent on various leisure time activities are given in Table 9.2-1. The pattern which emerges is one of greater involvement among sports bettors in activities away from home. Sports bettors participated in active team and non-team sports, attended sports events, and engaged in outdoors activities such as fishing, camping, and hunting more frequently than non-bettors. Those who placed an illegal bet on a sports event in 1974 spent even more of their leisure time on these activities than sports bettors in general. They also went to movies and nightclubs more often and were more frequently involved in community activities. Sports bettors were less inclined than others to spend time on home improvements, arts and crafts, reading books, and going to church activities.

Tables 9.2-2 and 9.2-3 provide summaries of recreation and vacation expenditures by the total sample, 1974 sports bettors, and those who bet illegally on sports in 1974. Sports bettors tend to spend more on both recreation and vacations than does the general population. Further, those who bet on sports illegally spend even more on vacation and recreation. These results indicate that sports bettors are active people who spend more money than average on recreation and who attend and participate in sports events more frequently than most people.

One of the concerns that has been expressed about legalizing sports betting is that attendance at games will drop. These concerns are derived partially from the experience of New York tracks when OTB was put into operation. The situations are, however, dissimilar since the track is a

Table 9.2-2

Recreation Expenditures and Sports Betting

Average dollars spent per week on recreation in 1974	Total Sample %	1974 Non Bettors %	All 1974 Sports Bettors %	Illegal 1974 Sports Bettors %
Less than \$5	31	53	12	10
\$5-\$9	20	16	22	4
\$10-\$14	15	13	19	20
\$15-\$24	17	12	21	32
\$25 +	17	6	26	34

Table 9.2-3

Vacation Expenditures and Sports Betting

Average dollars spent on vacations in 1974	Total Sample %	1974 Non Bettors %	All 1974 Sports Bettors %	Illegal 1974 Sports Bettors %
No vacation	23	36	13	9
Spent nothing	2	2	1	0
Under \$100	15	20	12	4
\$100-\$299	17	14	17	14
\$300-\$499	14	10	19	24
\$500-\$749	11	7	15	16
\$750 and over	18	11	23	33
<u>Mean vacation days, 1974</u>	18 days	15 days	20 days	21 days

traditional legal betting location and sports games are not. People who go to the track generally do so for the purpose of placing legal bets as well as watching the races, while people who attend sports events do so solely to watch the games. Legal betting outlets would not serve as a substitute for going to a football game in the same sense that OTB provides a convenient alternative to going to the track to place a bet; therefore the concern about legal betting outlets reducing attendance at games seems unfounded. We did, however, address this potential problem in two ways.

First, we inquired about current attendance at sports events and recorded the relationship between current betting behavior and current attendance. The results indicate that sports bettors attend more than non-bettors or bettors in general. Highest attendance is reported by people who are now betting illegally. (Table 9.2-4)

We asked illegal sports bettors whether they thought they would attend less if they were using a legal sports betting system. Most said that it would either make no difference or that they would be more likely to attend games. Only 16 percent said they would be less likely to attend the games themselves.

Finally we wanted to see if attendance might increase if the only way to bet legally on sports were at the games themselves, perhaps at betting windows much like those at horse tracks. Nearly half of the illegal sports bettors said that betting at the event would make no difference, and 16 percent said it might keep them from the games. (Table 9.2-5)

Table 9.2-4

Mean Attendance at Sports Events in 1974
by Betting Classification

	Mean days attended sports events in 1974
Total sample	19
Non-bettors	13
Bettors	22
Illegal bettors	28
Light illegal bettors ^a	19
Heavy illegal bettors ^b	45
All sports bettors	27
College sports bettors	35
All illegal sports bettors	41
Sports card bettors	48

^aLight illegal bettors wagered less than \$50 in 1974.

^bHeavy illegal bettors wagered more than \$50 in 1974.

Table 9.2-5

Likelihood of Impact of Legal Sports
Betting Systems on the Attendance at Sports Events

	Illegal Bettors %
<u>More or less likely to attend if betting with a legal system</u>	
More likely	25
Less likely	12
No difference	61
No answer	2
	<u>100</u>
<u>More or less likely to attend if the only legal place to bet were windows at the sports events</u>	
More likely	36
Less likely	16
No difference	46
No answer	2
	<u>100</u>

9.3 Sports Bettors and Other Betting

People who bet on sports place other legal bets to a greater extent than the general population. Compared to the bettor population at large, sports bettors report more participation in betting on horse and dog races and more go to casinos. The general betting population, however, engages more in lottery and bingo betting than do sports bettors. (Table 9.3-1)

Sports bettors also report betting illegally to a greater extent than the general population and the betting population at large. Comparing those who bet illegally on sports in 1974 with those who engaged in any form of illegal gambling in 1974, sports bettors bet on the horses with bookies to a greater extent but on the numbers to a lesser extent. Sports bettors' greater tendency to place sports bets with bookies may lead to using bookies for betting on the horses. Sports bettors are not necessarily "specialists"; their betting behavior, legal or illegal, tends to extend to most forms of gambling. (Table 9.3-2)

9.4 Exposure, Legalization and Sports Betting

There is a strong indication that exposure to betting on sports, either as a child or an adult, increases the likelihood that one will engage in sports betting. Twice as many of the 1974 sports bettors compared to the general population, said that either "most people" or "quite a lot of people" they knew as a child, or know now, bet on sports. This difference is even greater when bettors are compared to non-bettors. This statement is generalizable across betting with friends, betting with

Table 9.3-1

Sports Bettors and Legal Commercial Betting

Gambling activity	Total Sample %	1974 Bettors %	Sports Bettors %
Lotteries	24	40	38
Bingo	19	31	29
Horse races	14	23	25
Casinos	10	16	21
Dog races	4	6	10

Table 9.3-2

Sports Bettors and Illegal Betting

Gambling activity	Total Sample %	Bettors %	Illegal Bettors %	Sports Bettors %	Illegal Sports Bettors %
Any illegal outlet	11	18	100	28	100
Horses with bookies	2	4	22	6	27
Numbers	3	5	28	7	19

bookies, and betting on sports cards. While exposure to others in childhood can influence present betting in only one direction, current exposure is both causal and reflective of the individual's current behavior. Much of our behavior is patterned after that of models we have observed in the past whether authority figures or peers. If sports betting is a part of the culture, the chances are greater that the requisite skills will be learned, interests will be stimulated, and betting will become a part of an individual's life style. (Table 9.4-1)

A related question is whether exposure to sports betting results in a greater amount of cash expended on illegal betting. The results in Table 9.4-2 show that exposure to sports betting of any kind, as a child or as an adult, is related to the amount of money currently being spent on illegal betting.

In summary, exposure to betting on sports, whether that exposure is current or occurred during childhood, is positively related both to betting on sports with friends, with bookies, and on sports cards and to the amount of money bet illegally. Whether widespread availability of legalized sports betting would be likely to increase or decrease the amount of money bet illegally is another question. It could be that legalized sports betting would simply attract a new market and the illegal betting would continue unabated, or the legal betting system may attract some of the bettors from the illegal system.

There are two sources of information in the current study which may provide at least a partial answer to this question. The first source of information is the Nevada study. Sports betting is legal in betting

Table 9.4-1

Exposure to Sports Betting and Extent
of 1974 Sports Betting

	Total Sample %	Non Bettors %	1974 Sports Bettors	
			Total Betting %	Illegal Betting %
<u>People known as a child who bet sports with friends</u>				
Most people/quite a lot	21	6	44	50
A few/practically nobody	79	93	56	48
No answer	0	1	0	2
<u>People known now who bet sports with friends</u>				
Most people/quite a lot	31	9	64	70
A few/practically nobody	68	91	36	29
No answer	1	0	0	1
<u>People known as a child who bet on sports with bookies</u>				
Most people/quite a lot	6	3	11	21
A few/practically nobody	93	96	88	78
No answer	1	1	1	1
<u>People known now who bet on sports with bookies</u>				
Most people/quite a lot	10	4	18	36
A few/practically nobody	89	95	80	63
No answer	1	1	2	1
<u>People known as a child who bet on sports cards</u>				
Most people/quite a lot	10	3	19	40
A few/practically nobody	90	96	80	59
No answer	0	1	1	1
<u>People known now who bet on sports cards</u>				
Most people/quite a lot	15	5	30	63
A few/practically nobody	84	95	69	37
No answer	1	0	1	0

Table 9.4-2

1974 Illegal Betting Volume as Related to Exposure
To Sports Betting

	No Illegal Bets %	1974 Illegal Betting Volume	
		\$1-\$50 per Year %	Over \$50 per Year %
<u>People known as a child who bet sports with friends.</u>			
Most people/quite a lot	18	34	62
A few/practically nobody	81	65	38
No answer	1	1	0
<u>People known now who bet sports with friends</u>			
Most people/quite a lot	28	59	68
A few/practically nobody	72	41	32
No answer	0	0	0
<u>People known as a child who bet on sports with bookies</u>			
Most people/quite a lot	5	15	36
A few/practically nobody	95	85	64
No answer	0	0	0
<u>People known now who bet on sports with bookies</u>			
Most people/ quite a lot	7	24	61
A few/practucally nobody	92	76	39
No answer	1	0	0
<u>People known as a child who bet on sports cards</u>			
Most people/quite a lot	7	29	49
A few/practically nobody	92	71	51
No answer	1	0	0
<u>People known now who bet on sports cards</u>			
Most people/quite a lot	12	44	62
A few/practically nobody	87	56	37
No answer	1	0	1

Table 9.4-3

Willingness to Use Legal Sports Betting Facilities

1974 Illegal Sports Bettors	
	%
Would switch to legal system entirely	50
Would use both legal and illegal systems	43
Would not switch to legal system	6
No answer	1

Table 9.4-4

Desired and Required Features in a
Legal Sports Betting System*

Base: 1974 Illegal Sports Bettors Who Were Initially Unwilling to Switch Entirely to a Legal System.	Desired Features %	Required Features %
Telephone service	42	40
Credit	8	7
Flexible settlement data	10	9
Payoff as good as bookies	42	44
No income taxes on winnings	71	49
Would not use at all	1	--
No features absolutely necessary	--	17
No answer	7	5
Would use legal system instead of illegal if necessary features were present	--	78

*Note: Columns do not sum to 100 percent due to multiple responses.

parlors in Nevada so we can see how much illegal betting occurs in that state. In Nevada, eight percent of the sample reported betting at legal sports parlors but three percent also said they bet on sports with an illegal bookie. It is obvious that total legalization does not eliminate illegal betting. Second, in the national study, respondents who reported betting illegally on sports were asked if they would switch to a legal betting system if one were available. If they responded with an unqualified "yes," they were asked what features, if any, would be necessary to attract them to the legal system. Around half of those who bet illegally on sports in 1974 said they would be willing to use a legal sports betting system instead of the illegal system. Only about six percent, however, said they would not use the legal system at all. (Table 9.4-3)

When those who said either that they would not switch to a legal system or would use both the legal and illegal systems were asked what features would make a legal system more attractive, a large majority mentioned no income taxes on winnings. Substantial minorities mentioned payoffs equivalent to the illegal system and telephone service. Only one percent said they would not use the legal system no matter what features it had. When asked which features were absolutely necessary before they would use a legal sports betting system, the respondents mentioned the same three features: payoff as good as the illegal system, no income taxes on winnings, and telephone service. These features were mentioned with approximately equal frequency, with about 40 percent of those who were initially unwilling to switch to a legal system mentioning each. The

CONTINUED

4 OF 7

Table 9.5-1

Perceptions of Sports Betting as Luck or Skill
Among 1974 Sports Bettors

	Bets with Friends %	Bets with Bookies %	Sports card Bets %
Almost all luck/more luck than skill	40	49	52
Equal amounts of luck and skill	37	29	21
Almost all skill/more skill than luck	22	17	20
Don't know	1	4	6
No answer	*	1	1

*Less than one percent

Table 9.5-2

Perceptions of Sports Betting as Luck or Skill
Among 1974 Illegal Sports Bettors

	Bets with Friends %	Bets with Bookies %	Sports card Bets %
Almost all luck/more luck than skill	22	33	35
Equal amounts of luck and skill	36	45	38
Almost all skill/more skill than luck	42	19	27
Don't know	*	1	*
No answer	*	2	*

*Less than one percent

respondents were then asked whether, if the legal system incorporated all of the features they had indicated as absolutely necessary, they would use the legal system instead of the illegal system. Over three fourths of the respondents said they would. (Table 9.4-4) Adding those respondents to those who initially said they would use the legal system instead, and using the most favorable assumptions we arrive at 93 percent potential useage of the legal system. Six percent claim they would not use the legal system at all, and ten percent say they would use both legal and the illegal systems.

9.5 Luck and Skill

Sports bettors were asked whether they thought betting on sports required skill or was mostly luck. The respondents gave their opinion of various games by ranking the betting activities on a scale ranging from "almost all luck," through "more luck than skill," "equal amounts of luck and skill," "more skill than luck," to "almost all skill." The sports bettors, in general, felt that sports betting involves more luck than skill. One notable feature is that sports bettors perceive betting with bookies or on sports cards as involving more luck than betting with friends. A minority, about one-fifth, of the respondents think any kind of sports betting requires more skill than luck. These data reflect a general realistic perception by the majority of sports bettors. The majority of them realize that there is a large element of chance involved, and they are willing to take that chance. (Table 9.5-1)

In contrast to these results, the perception of those who engaged in illegal sports betting indicates they believe that more skill is involved

Table 9.6

Mean Ratings of How Often Sports Events Are Fixed*

	Total Sample	Non Bettors	All Sports Bettors	Illegal Sports Bettors
Professional sports	3.38	3.29	3.56	3.67
College sports	3.87	3.73	3.97	3.95
High school sports	4.43	4.34	4.54	4.55

*Scale: 1 = Fixed most of the time
2 = Fixed pretty often
3 = Fixed sometimes
4 = Almost never fixed
5 = Never fixed

in sports betting, especially when it comes to betting with friends. When rating the skill/luck element in betting with bookies and on sports cards, a slightly higher percentage said more skill than luck was involved than did those who bet with friends, but about twice as many said an equal amount of skill and luck are involved. (Table 9.5-2)

It is possible that those who bet illegally on sports actually do utilize more skill than the casual bettor, and realize that their acquired skills play a larger part when they are betting with less skilled people (friends) than when they are betting against bookies or on sports cards. Still, a minority of the people who bet illegally think that more skill than luck is involved when placing illegal bets. As is the case with those who bet with friends, even though most bettors realize that there is a large element of chance in illegal sports betting, they are willing to take the chance.

9.6 Perception of "Fixed" Games

Respondents were asked to rate the frequency with which, in their opinion, various games were "fixed." There is a decreasing perception of sports events being fixed as the level of the sport goes from professional to college to high school events. There is also a decreasing belief that games are fixed as we move from the non-bettors to the sports bettors to the illegal sports bettors.

Although these differences are not large, they do suggest a tendency toward a greater degree of optimism about the honesty of the games among bettors than among non-bettors. Perhaps this reflects a general tendency for people to justify their investments by being more likely to think the

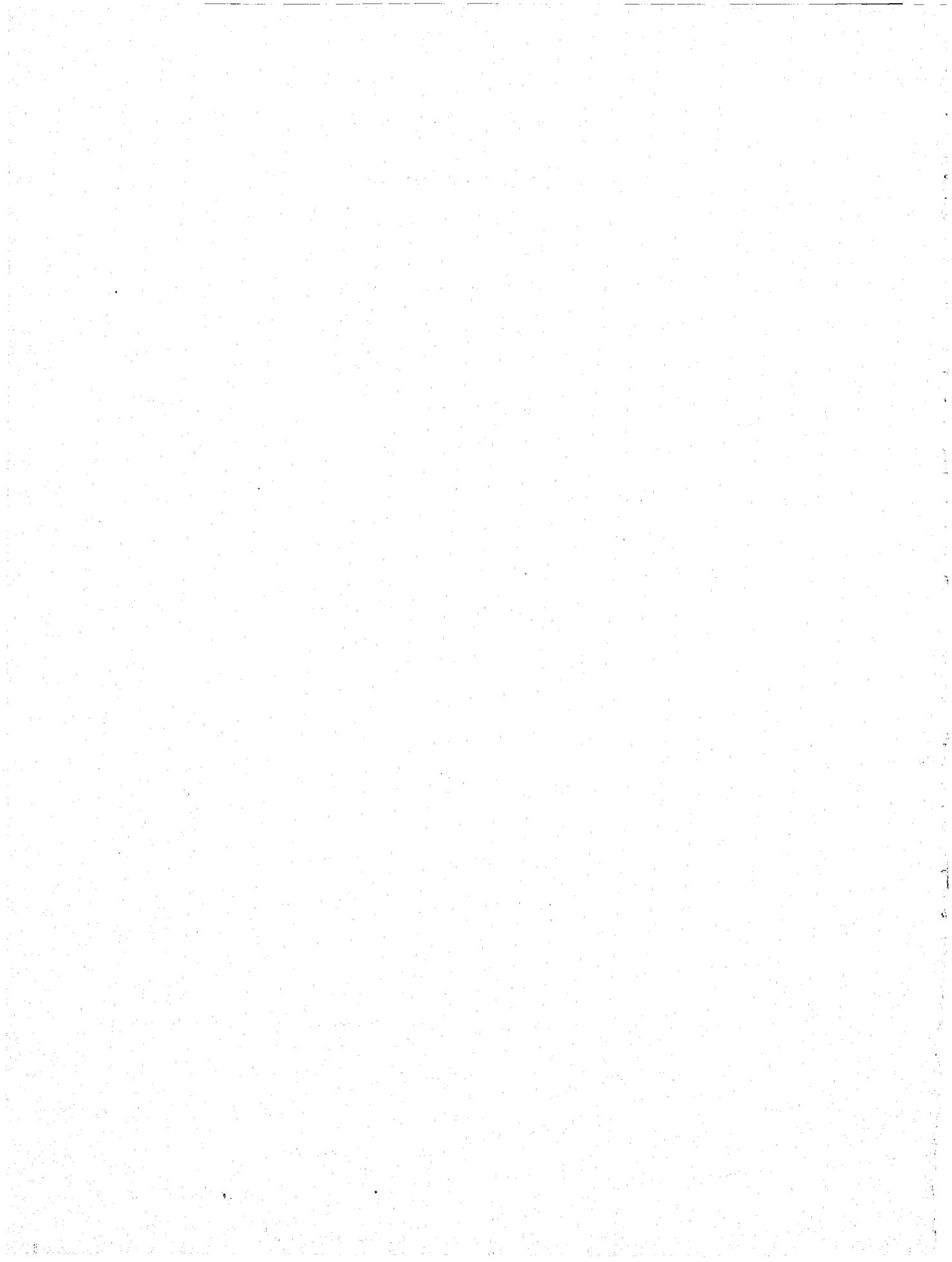
Table 9.7

Needs and Need Fulfillment

	Mean Need				Need Fulfillment*			
	Total Sample	Non Bettors	Sports Bettors 1974	Illegal Sports Bettors	Total Sample	Non Bettors	Sports Bettors 1974	Illegal Sports Bettors
Control over own life	5.85	5.38	6.30	6.58	-40	-30	-49	-45
Close, comfortable relationships	5.81	5.57	5.99	5.78	-3	-9	-10	+15
Interesting things to do	5.76	5.32	6.29	6.35	-50	-40	-73	-81
Good mannered associates	5.75	5.45	5.87	6.07	-23	-21	-19	-60
Things to look forward to	5.73	5.40	6.14	6.07	-9	-4	-31	-37
Success	5.41	4.97	5.83	5.93	-35	-41	-61	-81
Money	5.19	4.81	5.66	5.84	-112	-123	-144	-125
Chances to get ahead	5.09	4.66	5.48	5.73	-54	-63	-40	-65
Savings	5.03	4.76	5.44	6.05	-147	-153	-167	-185
Challenges	4.96	4.28	5.85	6.08	-19	-24	-46	-77
Time for recreation	4.82	4.17	5.44	6.07	-33	-1	-79	-133
Hard work	4.47	4.35	4.68	4.55	+107	+79	+129	+141
Luck	3.99	3.61	4.28	4.77	-16	-14	-32	-66
Excitement	3.71	2.92	4.59	4.90	+62	+88	+42	+14
Power	3.17	2.84	3.60	3.84	+1	-7	-21	-29

*Notes: Positive values indicate that people say they have more than they need; negative values indicate they need more than they have.

Values multiplied by 100 for ease of presentation.



object of investment is worthwhile--in this case honest. (Table 9.6)

9.7 Needs

In the course of the exploratory group sessions described in the Appendix A: Procedures, the discussants were asked why they thought people liked to gamble. On the basis of these discussions and previous literature on gambling, hypotheses were formed concerning various motives for gambling or not gambling. Some of the hypotheses were that people may gamble because it gives them a sense of power, or a sense of control (however illusory), or because it provides a chance to get ahead in life or to make money. Some hypotheses formed on the basis of group discussions with non-gamblers were: they were primarily believers in the Protestant Ethic, and they regarded gambling as a rather seedy and wasteful activity which might disrupt personal relationships. Based on these hypotheses, a list of concepts was developed and the respondents were asked first to rate the concepts according to their need for each in their lives; then to rate the same concepts according to how much of each they felt they now had in their lives.

With two exceptions--"things to look forward to" and "close, comfortable relationships with people"--the 1974 sports bettors expressed a greater aspiration for all the goals, and people who bet illegally on sports in 1974 expressed an even greater desire than sports bettors in general. On "things to look forward to," bettors and illegal bettors are not differentiated. On the need for "close, comfortable relationships with people" illegal bettors were significantly lower than bettors in

Figure 9.7

Summary of Greatest Need Discrepancies
by Bettor Classification

	Have a Greater Need For	Have Less Need For
Non-bettors		Excitement
All 1974 sports bettors	Money	
1974 illegal sports bettors	Luck Things to look forward to Challenges Interesting things to do Success Power Time for recreation Savings Well-mannered associates Chances to get ahead Control over their lives	Hard work Close, Comfortable relationships with people

general. The finding that people who bet on sports express a higher need for excitement, luck, money, and the like, is not in itself particularly helpful except for having one's intuition supported by figures. (Table 9.7)

Somewhat more informative is the pattern of discrepancies between what people say they need and what they say they have, or the extent to which the various needs are fulfilled, and the way in which this pattern varies among non-bettors and bettors. The mean need fulfillment values are also given in Table 9.7 for the total sample, non-bettors, all 1974 sports bettors, and those who bet on sports illegally in 1974. A negative value means that the need is greater than what people have and the positive values indicate that people have more than they need.

The signs of the mean fulfillment scores are in the same direction for all groups except in two instances: 1) Sports bettors need more "things to look forward to" and non-bettors have slightly more "things to look forward to" than they need, and 2) Those who bet on sports illegally in 1974 say they have more close, comfortable relationships with people than they need while all other groups say they need more of these relationships than they have. In every instance, except excitement, the need discrepancy is generally greater as one progresses from non-bettors, through all 1974 bettors, to those who bet illegally in 1974. With respect to excitement the trend is just the reverse. All groups have more excitement in their lives than they need, but non-bettors have about twice as much more than all 1974 bettors, who in turn have three times as much more than the illegal bettors. Recalling that bettors needed more excitement than

non-bettors, and that illegal bettors needed more than bettors in general, the relative positions allow us to conclude that people who are sports bettors are excitement seekers despite their reporting having more excitement in their lives than they need.

By rank-ordering the mean discrepancy figures in Table 9.7 for each concept across bettor classification groups, an illustrative table has been developed to indicate which group shows the largest discrepancy on each concept and the direction of the discrepancy. This illustration is provided in Figure 9.7. Non-bettors, as noted above, need less excitement than they have. All sports bettors combined say they have less money than they need. Illegal bettors need more of everything except hard work and close, comfortable relationships with people, which they need less of.

9.8 Excitement Ratings of Sports Betting

The respondents were asked to rate various games on how exciting they thought each was. Whether one compares the mean ratings across groups for a particular betting form, or compares the mean ratings across betting forms within a particular group, the differences are all significant and consistently in the same order. For each type of sports betting, the non-bettors give a lower excitement rating than do all 1974 sports bettors, who in turn rate the activity as less exciting than did those who bet on sports illegally in 1974. Comparing the three forms of sports betting, all groups rate betting on sports with friends as most exciting, betting on sports cards as next most exciting, and betting on sports with bookies as the least exciting activity. (Table 9.8)

Mean Ratings of Degree of Excitement of Betting on Sports
With Friends, Bookies and Sports Cards*

Excitement ratings	Total Sample	Non Bettors	All 1974 Sports Bettors	1974 Illegal Sports Bettors
Betting on sports with friends	3.11	2.02	5.07	5.67
Betting on sports cards	1.96	1.58	2.83	4.79
Betting on sports with bookies	1.74	1.50	2.24	3.87

*Scale: 1 = Not at all exciting; 8 = Very exciting

Figure 9.8

Level of Gambling Activity and Excitement Ratings for Sports

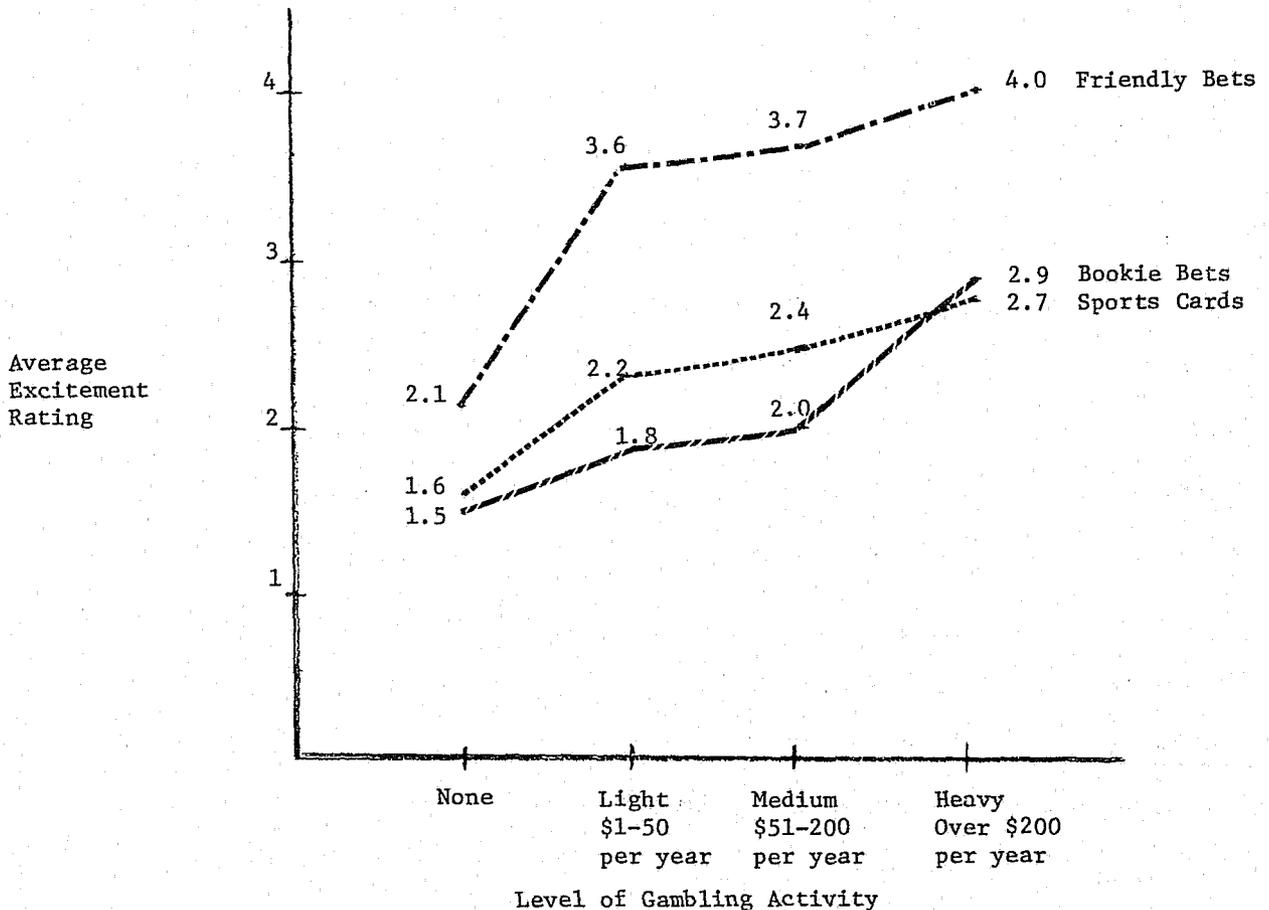


Figure 9.8 plots the relationship between amount bet on any kind of gambling in 1974 and excitement ratings for sports. It illustrates again that excitement is positively related to participation. Since sports cards are perceived as closer to friendly betting in generating excitement, it is also evident that participation is related to the amount of social interaction or level of competition.

9.9 Reasons Given for Betting or Not Betting on Sports

Respondents were asked to give as many as three main reasons why they bet on sports with friends and/or with bookies if they had bet in that way. These reasons were combined into two broad categories of money related reasons and activity-interest related reasons. Over 90 percent of the respondents gave some activity-interest reason for betting on sports with friends and bookies, but they were different reasons. The most frequently mentioned reason for betting with friends was "to have a good time." The reason most frequently mentioned for betting with bookies was the "challenge." "Excitement" was given as a reason more often for friendly betting while "to make money" was given as a reason for bookie betting. Almost twice the percentage of respondents mentioned some money related reason for betting with a bookie. (Table 9.9-1)

The reasons people gave for not betting on sports were collapsed into five major categories. The majority of the respondents, both those who never bet on sports and those who bet on sports but not with a bookie, gave activity-interest related reasons for not betting. The three most frequently mentioned reasons given by those who never bet on sports were

Table 9.9-1

Net Counts of Reported Reasons for
for Betting on Sports*

	Sports Bets With Friends %	Illegal Sports Bets %
Activity related	94	92
Money related	33	64

*Notes: Columns do not sum to 100 percent due to multiple responses.

Respondents chose one, two or three reasons from a list of 11 reasons provide.

Table 9.9-2

Net Counts of Reported Reasons for
Not Betting on Sports*

	Non-Bettors %	Non-Bookie Bettors %
Money related	45	50
Activity related	79	66
Moral consequences	12	10
Legal consequences	17	27
Social consequences	7	12

*Notes: Columns do not sum to 100 percent due to multiple responses.

Respondents chose one, two or three reasons from a list of 18 reasons provided.

"I have other things to do," "I just never think about it," and "I don't know anything about it." The same three reasons were the most frequently mentioned by those who bet only with friends for not betting on sports with bookies. By and large, people seem not to be concerned about the possible social, moral, or legal consequences of sports betting. The reasons they give for not betting are, on the surface at least, indicative that the activity is simply not a part of their life style. It is pertinent here to recall the section of this chapter dealing with exposure to sports betting. A vast majority of the non-bettors said they received very little exposure to sports betting as a child and had very little exposure to it now. It seems likely that exposure is a prime ingredient in developing the requisite skills (i.e., "knowing about it"). And, once one knows about something one generally tends to think about it to a greater degree. Almost everyone has other things to do, but if sports betting becomes a part of one's life style one is more likely to bet on sports. There are those, of course, who have been exposed to the activity of betting on sports who will still regard it as a waste of time. Nevertheless, it stands to reason that a greater degree of exposure leads to higher participation rates. (Table 9.9-2)

9.10 Attitudes Towards Legalization

A random sub-sample of bettors were asked what possible consequences a legal sports betting system would have. The positive consequences most often indicated were economic ones--more money to run the government and more jobs for people. The negative consequences most often indicated were

societal ones--people gambling more than they can afford, working less, and the possible harmful influence on children. A third of the sample thought legalization of sports betting would result in more fixed games, and slightly over 40 percent thought it would result in corruption of both college and professional sports. (Table 9.10-1)

All respondents were asked a series of questions concerning whether specific betting activities should be legalized, if not already legal in their state, and whether they would bet on such things if they were legal. As there are no legal sports betting facilities in the United States, with the exception of Nevada, all respondents in the national sample should have answered the questions concerning the legalization of sports betting from the point of view of the legalization of a currently illegal activity. Such was not the case. Four percent of the sample said betting on sports cards was legal. Of these, about three-fourths wanted the non-existent legal betting continued. About one percent of the total sample said betting on sports with a bookie was legal where they lived, and about half of these wanted to see legal sports betting with a bookie continued. If a respondent claimed such activities were legal and wanted them continued or said they were illegal and wanted them made legal, he was counted as being positive towards legalization. If he claimed the activity was legal and wanted it abolished, or said it was illegal and opposed its legalization, he was counted as being negative towards legalization.

Slightly less than a third of the total sample favored the legalization of sports card betting. This proportion falls to 15 percent among non-bettors and increases dramatically to over 50 percent among 1974 sports

Table 9.10-1

Perceived Consequences of Legalization
of Sports Betting

	Random Subset of Bettors %
<hr/>	
A. <u>Positive consequences</u>	
A lot more money to run the government	67
More jobs for people	63
More of a chance for the common man to get rich	48
Less money for organized crime	27
B. <u>Negative consequences</u>	
More people working less because they are gambling	67
More people gambling more than they can afford	59
More of a chance that children will be influenced to gamble	53
Corruption of professional sports	42
Corruption of college sports	40
Fixed games	33
More racketeers connected to it	22

bettors, and to about 70 percent among those who placed an illegal sports bet in 1974. About 14 percent of the total sample said they would be willing to utilize a legal sports card betting system, and the proportion climbs to almost three-fourths among those who placed an illegal sports bet in 1974. (Table 9.10-2)

Fewer respondents in all categories were favorable towards the legalization of sports betting with bookies. Approximately one-fifth of the total sample favored such legalization. This proportion increased to almost one-half among those who had placed an illegal sports bet in 1974. (Table 9.10-3) Less than 20 percent of the total sample said they would engage in legal sports betting with bookies. (Table 9.10-4) Legal sports card usage is potentially stronger. Almost a third of those who currently bet on sports say they would bet through a legal sports card system. (Table 9.10-5)

Some conclusions can be drawn from these data. First, a minority of the people in the United States favor the legalization of bookie betting on sports or sports cards betting, although 10 percent more favor legalization of a sports card system. A minority of sports bettors, legal and illegal, favor legalization of sports books, but a majority are in favor of legal sports card betting. Second, among those who are currently non-bettors, about twice as many say they would use a legal sports card system (four percent) than say they would place legal bookie bets (two percent). In Nevada, however, where both sports cards and betting on sports at betting parlors are legal, a greater percentage of the sample bet illegally on sports than in the rest of the nation. Further, sports card bettors

Table 9.10-2

Attitudes Towards Legalization of Sports Card Betting

	Total Sample %	Non Bettors %	All 1974 Sports Bettors %	1974 Illegal Sports Bettors %
Positive to legalization	32	15	51	70
Negative to legalization	54	69	40	24
Unsure	8	6	6	4
No answer	6	10	3	2

Table 9.10-3

Attitudes Towards Legalization of Sports Betting with Bookies

	Total Sample %	Non Bettors %	All 1974 Sports Bettors %	1974 Illegal Sports Bettors %
Positive to legalization	20	9	34	49
Negative to legalization	71	78	64	50
Unsure	3	5	0	0
No answer	6	8	2	1

Table 9.10-4

Willingness to Engage in Legal Betting with Bookies

	Total Sample %	Non Bettors %	All 1974 Sports Bettors %
Would bet	7	2	16
Would not bet	89	94	81
Don't know	1	1	0
No answer	3	3	3

Table 9.10-5

Willingness to Bet on Legal Sports Cards

	Total Sample %	Non Bettors %	All 1974 Sports Bettors %
Would bet	14	4	31
Would not bet	76	87	58
Don't know	4	1	4
No answer	6	8	7

tend to place small bets similar to lottery purchases. Legalization of sports card betting consequently does not seem to be an effective mechanism in terms of drawing trade from the illegal market nor for generating revenue.

CHAPTER TEN

NUMBERS

Betting on the numbers (or policy) is widely practiced in the larger urban centers, particularly in the Northeast. While the game is widely known in these areas, there are a number of popular misconceptions concerning the game. For instance, one common misconception is that it is a game played almost entirely by the poor, by blacks, and by Puerto Ricans. In a recent study commissioned by the Fund for the City of New York¹, it was found that while proportionately more blacks and Puerto Ricans bet on the numbers, 55 percent of the players were white and three-fourths were employed.

10.1 Extent of Numbers Betting

In the current study, slightly over seven percent of the respondents, representing 10.4 million people 18 years old or over in the United States, reported betting on the numbers sometime in their life. Three percent, projecting to approximately 4.3 million adults, reported placing a numbers bet in 1974. The total 1974 handle provided by these participants was about 1.1 billion dollars. With the estimated take out rate being 54 percent, numbers bettors lost approximately 575 million dollars in 1974.

The average reported daily bet on the numbers was \$4.17, and the average number of days numbers players reported betting in 1974 was 71.5.

1. Fund for the City of New York. Legal Gambling in New York: A Discussion of Numbers and Sports Betting, 1972.

Table 10.2-1

Distribution of 1974 Numbers Betting
by Demographic Variables

	1974 Numbers Betting %
<u>TOTAL</u>	3
<u>Sex</u>	
Male	4
Female	2
<u>Race</u>	
White	2
Non-white	11
<u>Region</u>	
Northeast	8
North Central	2
South	1
West	1
<u>Distance from 25 largest cities</u>	
24 miles or less (urban)	7
25-49 miles (suburban)	3
50 miles or more (non-urban)	1
<u>Ethnic Background</u>	
Italian	10
Spanish speaking	9
African	7
West European	2
British	1
East European	1
Irish	1
Other	5
<u>Religious Preference</u>	
Catholic and Orthodox	5
Jewish	4
All Protestant combined	3
Protestant Bible Oriented Sects	2
Atheist, Agnostic, No Preference	0.2
<u>Age</u>	
18-24 years	4
25-44 years	4
45-64 years	3
65 and over	0.5
<u>Marital Status</u>	
Divorced or Separated	10
Married	3
Never married	2
Widowed	2
<u>Education</u>	
Less than High School	3
High School Graduate	5
Some College	3
College Graduate	1

This results in an average annual bet of \$273. A third of the participants reported winning in 1974, and the average amount won by those who won was \$565.

10.2 Who Bets on the Numbers?

Proportionately, twice as many men as women bet on the numbers. The proportion betting in the Northeast is four times greater than the North Central and eight times greater than the rest of the country. The greatest participation rate in numbers betting is in the urban areas, followed by suburban and non-urban areas, in that order. The participation rate is over twice as great in urban than in suburban areas, and seven times as great in the urban areas than in the non-urban areas. Even though participation in numbers betting is low in the non-urban compared to the urban areas, it nevertheless does occur.

Over five times the proportion of the non-white population bets on numbers than the white population. The percentage of people betting on numbers is highest among those of Italian, African, or Spanish speaking ethnic backgrounds. All other groups participate proportionately less than the general population.

Proportionately, many more divorced or separated people bet on the numbers. All other categories of marital status show a participation rate equal to or lower than the general population. Participation in numbers

betting is greater among younger people, although there is no marked decline until the retirement years. This finding is very likely attributable to the reduced income of older people since respondents at the very lowest income level participate in numbers betting proportionately less than any other income group. Those with college degrees show one third the participation rate of the general population. Participation among those who graduated from high school and did not go beyond is greater than among the general population, and the rates for the other education categories are equal to that of the general population. (Tables 10.2-1) There is not much difference in the participation rates of income groups other than the relatively low participation by those whose family income is less than \$5,000 a year. The percent of family income spent on numbers betting declines steadily across income groups after those with incomes of less than \$5,000 a year. Any effort to generate revenue by the legalization of numbers would hence place the heaviest burden on those with lower but not the lowest incomes. (Table 10.2-2)

10.3 Leisure Time Use and Numbers Betting

As is the case with sports and horse bettors, those who bet on the numbers spend less of their leisure time on activities around the house, such as visiting friends and relatives and home improvements. More of their time is spent on watching and participating in sports events, community activities, and going to bars, nightclubs, and movies. Numbers bettors tend to spend more on recreation and vacations than the general populace. (Tables 10.3-1, 10.3-2 and 10.3-3)

Table 10.2-2

Numbers Betting by Income

	1974 Numbers Bettors %	Mean % of Family Income Bet On Numbers in 1974 %
Total sample	3	0.07
<u>Income</u>		
Under \$5,000	1	0.02
\$5,000-\$10,000	4	0.19
\$10,000-\$15,000	3	0.09
Over \$15,000	4	0.02

Table 10.3-1

Mean Number of Days Per Year on Leisure Activities

	1974 Non Bettors	1974 Bettors	1974 Numbers Bettors
Watching television	215	213	236
Reading newspapers or magazines	181	227	230
Doing nothing, napping, daydreaming	115	101	111
Reading books	92	94	109
Home improvements/gardening	92	79	45
Visiting with friends or relatives	81	85	67
Church or related activities	78	43	46
Knitting, sewing	59	38	19
Fishing, camping, hunting	18	29	21
Arts and crafts	18	24	18
Drinking alcoholic beverages (except at meals)	17	61	76
Community activities	15	18	30
Active non-team sports	13	36	21
Attending sports events	13	22	43
Active team sports	9	23	34
Movies or theatre	8	17	31
Nightclubs, bars, dancing	6	26	44
Opera, museums, lectures	6	8	11

Table 10.3-2

Recreation Expenditures

	1974 Non-Bettors %	1974 Bettors %	1974 Numbers Bettors %
<u>Amount spent per week</u>			
Less than \$5	53	17	13
\$5-\$9	16	23	13
\$10-\$14	13	17	14
\$15-\$24	12	21	25
\$25 and over	6	22	35

Table 10.3-3

Vacation Expenditures

	1974 Non-Bettors %	1974 Bettors %	1974 Numbers Bettors %
<u>Amount spent in 1974</u>			
No vacation	36	14	20
Spent nothing	2	1	1
Less than \$100	20	13	7
\$100-\$299	14	18	8
\$300-\$499	10	16	13
\$500-\$749	7	14	22
\$750 and over	11	24	29
<u>Mean vacation days, 1974</u>	15 days	19 days	14 days

10.4 Numbers Betting and Other Betting

Those who bet on the numbers in 1974 also gambled proportionately more on other things, both legal and illegal, than the general population. Unlike those who placed illegal horse and sports bets, however, they did not gamble proportionately more on everything than the total bettor population. The numbers bettors appear in approximately the same proportions as the total bettor population in bets on sports with friends, bingo, casinos, and dog races. They engaged in less illegal sports betting, but bought lottery tickets and placed legal and illegal bets on the horses proportionately more than the bettor population. Although the gambling behavior of numbers bettors is generalized to a marked extent, it is not as pervasive as those who bet illegally on sports and horses. (Tables 10.4-1 and 10.4-2)

The greatest differentiator between the betting behavior of numbers bettors and the total betting population is the lottery. Lotteries and numbers betting are quite similar in requiring a small cash outlay and offering a slim chance to win a lot of money. The one feature not offered by most lotteries which is available in numbers betting is the opportunity to choose one's own number. Some recent experimental data¹ suggests that such an opportunity, or the provision of some other illusion of control, results in greater confidence in one's chance of winning and, consequently, a greater devotion to the game. At the time of this writing, a legal numbers game has been in operation in New Jersey for a little less than a year. The game, called

1. Langer, E. J. The illusion of control. Journal of Personality and Social Psychology, 1975, 32, 311-328.

Table 10.4-1

Betting on Numbers and Legal Betting

Gambling Activity	Total Sample %	1974 Bettor Population %	1974 Numbers Bettors %
Sports with friends	28	46	45
Lotteries	24	40	62
Bingo	19	31	34
Horse tracks	15	23	45
Casinos	10	16	18
Dog tracks	4	6	6

Table 10.4-2

Betting on Numbers and Other Forms of Illegal Betting

Gambling Activity	Total Sample %	1974 Bettor Population %	All 1974 Illegal Bettors %	1974 Numbers Bettors %
Any illegal outlet	11	18	100	100
Illegal sports bets	4	6	36	26
Illegal horse bets	2	4	22	34

"PICKIT", offers the opportunity to choose one's own number. The Pickit operation had been in existence for about two months when the interviewing for the current study took place. At that time, 11 percent of the New Jersey sample reported having bought a ticket, and only 10 percent of those who had bet on the numbers in 1974 had done so. Over a third of the New Jersey numbers players said they would not use the legal game no matter what features were added to make it attractive. Further, only six percent said they would switch from numbers betting to the legal game entirely if such desirable features as no income taxes on winnings and a payoff rate equal to that of the illegal game were added. (Table 10.4-3) In summary, Pickit does not seem to attract players from the illegal market. One reason for this is probably greater convenience of placing an illegal bet, but this doesn't account for the almost total unwillingness to switch from the illegal game. Over 40 percent of the New Jersey numbers players said the Pickit game was easily accessible, about a fourth said it was very inconvenient to buy a ticket, and another fourth didn't know. (Table 10.4-4)

One hypothesis at the beginning of the study was that legal forms of the numbers game would be resisted, especially by non-whites who were illegal numbers bettors, because they might perceive legalization as an attempt by a predominantly white government to take over a source of black neighborhood revenue. The answers to two questions seemed to confirm this idea. Forty-four percent of the non-white numbers bettors thought a legal numbers game would result in fewer chances to get ahead while none of the white number bettors in New Jersey thought it would. Similarly 44 percent of the non-whites thought a legal numbers game would result in less neighborhood friendliness, and only 12 percent of the whites thought so. (Table 10.4-5)

Table 10.4-

Desired and Required Features in the
New Jersey Pickit Game*

Base: New Jersey Numbers Bettors	Desired Features %	Required Features %
Telephone service	6	0
Credit	0	0
Flexible settlement dates	0	0
Payoff as good as illegal game	32	6
No income taxes on winnings	30	12
Would not use at all	35	--
No features absolutely necessary	--	34
No answer	19	19
Would use Pickit instead of betting illegally if necessary features were present	--	6

*Note: Columns sum to more than 100 percent due to multiple responses.

Table 10.4-4

Convenience of Purchasing New Jersey Picket Tickets

	All New Jersey Respondents %	1974 New Jersey Numbers Players %
Can buy in a lot of places	24	43
A little inconvenient	17	9
Very inconvenient	6	26
Don't know	36	22
No answer	17	0

Table 10.4-5

Perceptions of the Community Impact of
a Legal Numbers Game

	<u>1974 New Jersey Numbers Bettors</u>		
	<u>All</u>	<u>Non-White</u>	<u>White</u>
	<u>%</u>	<u>%</u>	<u>%</u>
A legal numbers game results in:			
<u>Chances to get ahead</u>			
Fewer	19	44	0
More	24	41	12
No change	57	15	88
<u>Neighborhood friendliness</u>			
Less	25	44	12
More	7	0	12
No change	68	56	76

Table 10.5

Exposure to Numbers Betting and Extent
of 1974 Numbers Betting

	Total Sample %	Non Bettors %	1974 Bettors %	1974 Numbers Bettors %
<u>People known as a child who bet on numbers</u>				
Most people/quite a lot	7	3	9	52
A few/practically nobody	92	96	90	46
No answer	1	1	1	2
<u>People know now who bet on numbers</u>				
Most people/quite a lot	9	3	12	80
A few/practically nobody	90	96	87	20
No answer	1	1	1	0

Table 10.6

Percent of People Betting on the Numbers by Types
of Legal Gambling Available

Forms of Legal Gambling Available	% of Sample Betting on Numbers in 1974 %
Total sample	3
None	2
Horse or dog races	1
Horse or dog races & lotteries	4
Horse or dog races, lotteries and others	12

10.5 Exposure to Numbers Betting

As with other forms of betting, exposure to numbers betting bears a strong relationship to betting behavior. Over half of the people who bet on the numbers in 1974 said they knew quite a few people when they were children who engaged in numbers betting. Fewer than 10 percent of the total 1974 betting population reported a similar degree of exposure as children, and only three percent of the non-bettors did so. With respect to current exposure, four-fifths of the 1974 numbers bettors report that they know quite a few people now who bet on the numbers. This degree of current exposure was reported by only 12 percent of the total 1974 betting population and, again, three percent of the non-bettors. (Table 10.5)

10.6 Legalization of Gambling and Numbers Betting

If exposure to betting on the numbers is related to betting on the numbers, it could be argued that legalization of gambling should be positively related to the extent of numbers betting. This hypothesis assumes that legalization results in greater exposure and that the propensity to engage in a particular form of gambling is increased by exposure to gambling in any form rather than a specific type of gambling. The data indicate that the extent of numbers betting tends to increase as more forms of gambling are legalized. (Table 10.6) This trend is not conclusive evidence of the effects of legalization on numbers betting, however. The states which have legalized both horse or dog tracks and lotteries are centered in the North Central and Northeastern regions, while the states with both of these forms plus something else legal are all in the Northeast. These areas were

already the primary seats of numbers betting prior to the legalization of those gambling activities. After accounting for demographic and economic differences, as noted on page 167, a multivariate analysis indicated numbers participation may increase with the presence of a state lottery but decrease with the presence of horse tracks and legal bingo.

10.7 Luck and Skill

Numbers bettors for the most part have a realistic perception of the amount of luck involved in playing the numbers game. Eighty-eight percent of the numbers bettors realize the game involves at least a large element of chance. There seems to be a hard core of about 15 percent of any population, bettors or not, who believe that even the chanciest of games require some skill. (Table 10.7)

10.8 Perception of "Fixed" Games

As with other forms of betting, the more a person is immersed in a gambling subculture the more optimistic he is concerning the honesty of the game. Non-bettors thought numbers games were fixed between "almost all of the time" and "pretty often." Bettors in general gave a mean rating of fixed between "pretty often" and "sometimes," while the mean ratings for numbers bettors came closest to the "sometimes" point on the scale. (Table 10.8)

Another gauge of numbers players' confidence in the integrity of the game is their perception of the likelihood that they will be paid if they win. Fifty-five percent said they were "very sure" they would be paid if they won, and another 24 percent said they were "pretty sure" of being paid.

Table 10.7

Perception of Numbers Betting as Luck or Skill

	Total Sample %	Non Bettors %	1974 Bettors %	1974 Numbers Bettors %
Almost all luck/more luck than skill	64	47	74	88
Equal amounts of luck and skill	8	10	7	8
Almost all skill/more skill than luck	6	7	5	4
Don't know	21	35	13	0
No answer	1	1	1	0

Table 10.8

Mean Ratings of How Often Numbers Games are Fixed*

Total Sample	Non Bettors	1974 Bettors	1974 Numbers Bettors
2.02	1.92	2.07	2.64

*Scale: 1 = fixed most of the time; 2 = fixed pretty often;
3 = fixed sometimes; 4 = almost never fixed;
5 = never fixed.

Only five percent said they were "not very sure," and two percent said they were "not sure at all."

10.9 Convenience and Availability

Almost three fourths of those who bet on the numbers in 1974 said it was possible to place a numbers bet by telephone. A far smaller proportion of the total bettor sample and the non-bettors thought it was possible to do so. This probably reflects partly a lack of information on the part of those who do not bet on the numbers and partly a lack of availability. Virtually all of the numbers bettors were sure of their answer to this question, while less than 80 percent of the bettors and even fewer of the non-bettors were sure of their answer. However, when asked whether it was possible to place bets on credit, only 13 percent of the numbers bettors said it was possible to do so. How one can place a bet by phone without using credit, unless a standing deposit is placed with the runner, is not known. It is possible that there is some arrangement for immediate settlement which is not regarded as credit, but this question was not asked in the interview. When asked whether it was possible to place a numbers bet where they worked or lived, 65 percent of the numbers bettors responded affirmatively, and 57 percent said it was possible to place a numbers bet near where they worked or lived. Only 17 percent said it was inconvenient to place a numbers bet. About the same proportion of the total bettor sample and the non-bettors said it was inconvenient to place a numbers bet, but over twice the proportion of people who don't bet the numbers than the numbers bettors said they didn't know how easy or hard it was to place a numbers bet. (Table 10.9)

Table 10.9

Convenience and Availability of Numbers Betting*

<u>How Numbers Bets Can Be Placed</u>	Non Bettors %	All 1974 Bettors %	1974 Numbers Bettors %
By phone	15	29	74
Where they work or live	10	19	65
Near where they work or live	8	17	57
Somewhere else easy to get to	4	12	34
Somewhere else hard to get to	1	6	16
Can't be done in area	19	10	1
Don't know	20	18	9

*Note: Columns do not add to 100 percent due to multiple responses.

Sixty percent of the numbers bettors report personally knowing their runner and 52 percent say they personally know the person who pays them if they win. Sixty-two percent say that the same person who takes their bet pays them.

10.10 Needs

As is the case for gamblers in general, numbers bettors on the average say they need more of almost everything they were asked about--but especially "excitement", "luck," "money," and "chances to get ahead." The highest discrepancies between what numbers bettors feel they need and what they feel they have, are "money," "success," "savings," and "chances to get ahead"--all of which they feel they have too little of--and "hard work," which they feel they have too much of. As with those who engage in other forms of gambling, the need for excitement expressed by numbers bettors is greater than that for any other comparison group. However, as with other bettor groups, they say that they have slightly more excitement in their lives than they need. (Table 10.10) This excess of excitement, however, is lower than that reported by any of the comparison groups.

10.11 Ratings of Excitement

Numbers players did indeed rate the numbers game as more exciting than did non-bettors or the total bettor sample. The total bettor sample thought the numbers game was somewhat more exciting than did the non-bettors, but the ratings of both of these groups were not much higher than the total population ratings. Most people perceive the numbers game as rather dull, but numbers players rank it as above the midpoint on an excitement scale.

(Table 10-11)

Table 10.11

Mean Excitement Ratings of the Numbers Game*

Total Sample	Non Bettors	1974 Bettors	1974 Numbers Bettors
1.63	1.48	1.74	4.64

*Note: 1 = not at all exciting; 8 = very exciting.

Table 10.12

Net Counts of Reported Reasons Given for Betting Or Not Betting on Numbers

	Respondents who Bet on Numbers in 1974 %	Respondents Who Did Not Bet on Numbers in 1974 %
<u>Reasons for betting</u>		
Activity related	43	--
Money related	46	--
<u>Reasons for not betting</u>		
Activity related	--	76
Money related	--	40
Legal consequences	--	24
Moral consequences	--	8
Social consequences	--	6

*Notes: Columns do not sum to 100 percent due to multiple responses.

Respondents chose one, two or three reasons from a list of 18 for not betting and from a list of 11 for betting.

Table 10.10

Needs and Need Fullfillment*

	Mean Need ^a				Need Fullfillment ^b			
	Total Sample	Non Bettors	1974 Bettors	1974 Numbers Bettors	Total Sample	Non Bettors	1974 Bettors	1974 Numbers Bettors
Control over own life	5.85	5.38	6.11	6.13	-40	-30	-45	-17
Close, comfortable relationships	5.81	5.57	5.95	6.11	-3	-9	-1	+15
Interesting things to do	5.76	5.32	6.03	6.16	-50	-40	-60	-72
Well mannered	5.75	5.45	5.90	6.41	-23	-31	-20	-59
Things to look forward to	5.73	5.40	5.92	5.76	-9	-4	-13	+27
Success	5.41	4.97	5.65	5.89	-35	-41	-32	-117
Money	5.19	4.81	5.44	6.31	-112	-123	-112	-237
Chances to get ahead	5.09	4.66	5.35	6.02	-54	-63	-48	-100
Savings	5.03	4.76	5.25	5.84	-147	-153	-149	-226
Challenges	4.96	4.28	5.39	5.41	-19	-24	-24	-48
Time for recreation	4.82	4.17	5.20	5.48	-33	-1	-49	-69
Hard work	4.47	4.35	4.51	4.45	+107	+79	+125	+118
Luck	3.99	3.67	4.23	4.92	-16	-14	-21	-75
Excitement	3.71	2.92	4.24	4.64	+62	+88	+44	+42
Power	3.17	2.84	3.98	3.92	+1	-7	0	-53

*Note: Positive values indicate that people say they have more than they need; negative values indicate they need more than they have.

^aSee pages 55 and 56 of Appendix D: Questionnaire Scale: 1(Not at all____) to 8 (Very ____).

^{bb}Derived by subtracting "need" from "have" scores and multiplying by 10 for ease of presentation.

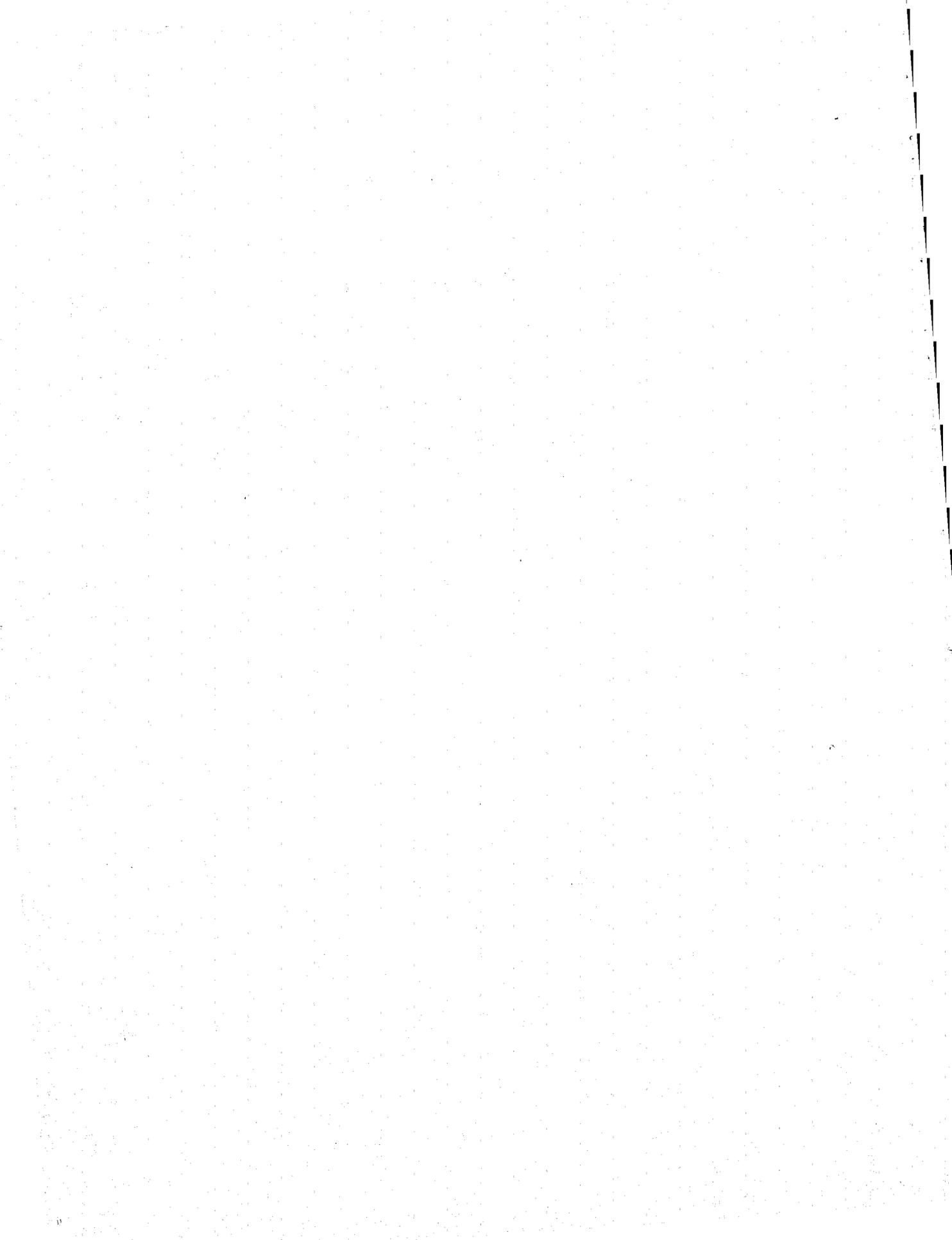


Table 10.13-1

Attitudes Towards Legalization of the Numbers Game

	Total Sample %	States Where Lotteries are Legal %	States Where Lotteries are Not Legal %	1974 Numbers Bettors %
Positive to legalization	22	30	16	69
Negative to legalization	60	55	63	28
Unsure	12	9	14	2
No answer	6	6	7	1

Table 10.13-2

Perceived Consequences of Legalization
of Numbers Betting

	Random Subset of Bettors %
<u>Positive consequences</u>	
More jobs for people	64
A lot more money to run the government	58
Less money for organized crime	55
More of a chance for the common man to get rich	30
<u>Negative consequences</u>	
More people gambling more than they can afford	62
More of a chance that children will be influenced to gamble	61
More racketeers connected to it	46
More people working less because they are gambling	25

10.12 Reasons People Give for Playing the Numbers

Respondents who had bet on the numbers in 1974 were asked to give as many as three reasons why they played the numbers. The reason mentioned most frequently was "to make money" (46 percent), and a few respondents (10 percent) viewed playing the numbers as a chance to get rich. Others frequently mentioned reasons for playing the numbers were "the challenge" (20 percent), "the excitement" (19 percent), and "something to look forward to" (14 percent).

If the respondent did not play the numbers in 1974 and indicated that some gambling was a part of his life style, he was asked to give as many as three reasons why he did not play the numbers. By far the most frequently mentioned reasons were disinterest in the activity itself, such as "not interested in the game" (48 percent), "don't know anything about it" (45 percent), and "have other things to do" (32 percent). Fewer respondents were concerned about the social or moral consequences of numbers betting, such as "causes corruption" (one percent) and "bad for the family" (less than 0.5 percent).

10.13 Attitudes Towards Legalization

People are generally negative towards the legalization of a numbers game. A clear majority of the total sample are against legalization of numbers. This is true even in states where lotteries are currently legal. Even if one assumes that those who were unsure or did not answer the question could be swayed towards a positive attitude, the majority would still oppose legalization of numbers. (Table 10.13-1)

Table 10.13-3

Willingness to Bet on a Legal Numbers Game

	Total Sample %	1974 Numbers Bettors %
Would bet	10	62
Would not bet	79	35
Don't know	7	0
No answer	4	3

Table 10.13-4

Features Desirable and Required in a
Legal Numbers Game*

Base: 1974 Numbers Bettors Who Initially Said They Would Not Use a Legal Numbers Game.	Desired Features %	Necessary Features %
Telephone service	21	14
Credit	4	8
Flexible settlement dates	3	5
Payoff as good as the illegal game	28	14
No income taxes on winnings	56	44
Would not use a legal game at all	23	--
No features absolutely necessary	--	17

*Note: Columns do not sum to 100 percent due to multiple responses.

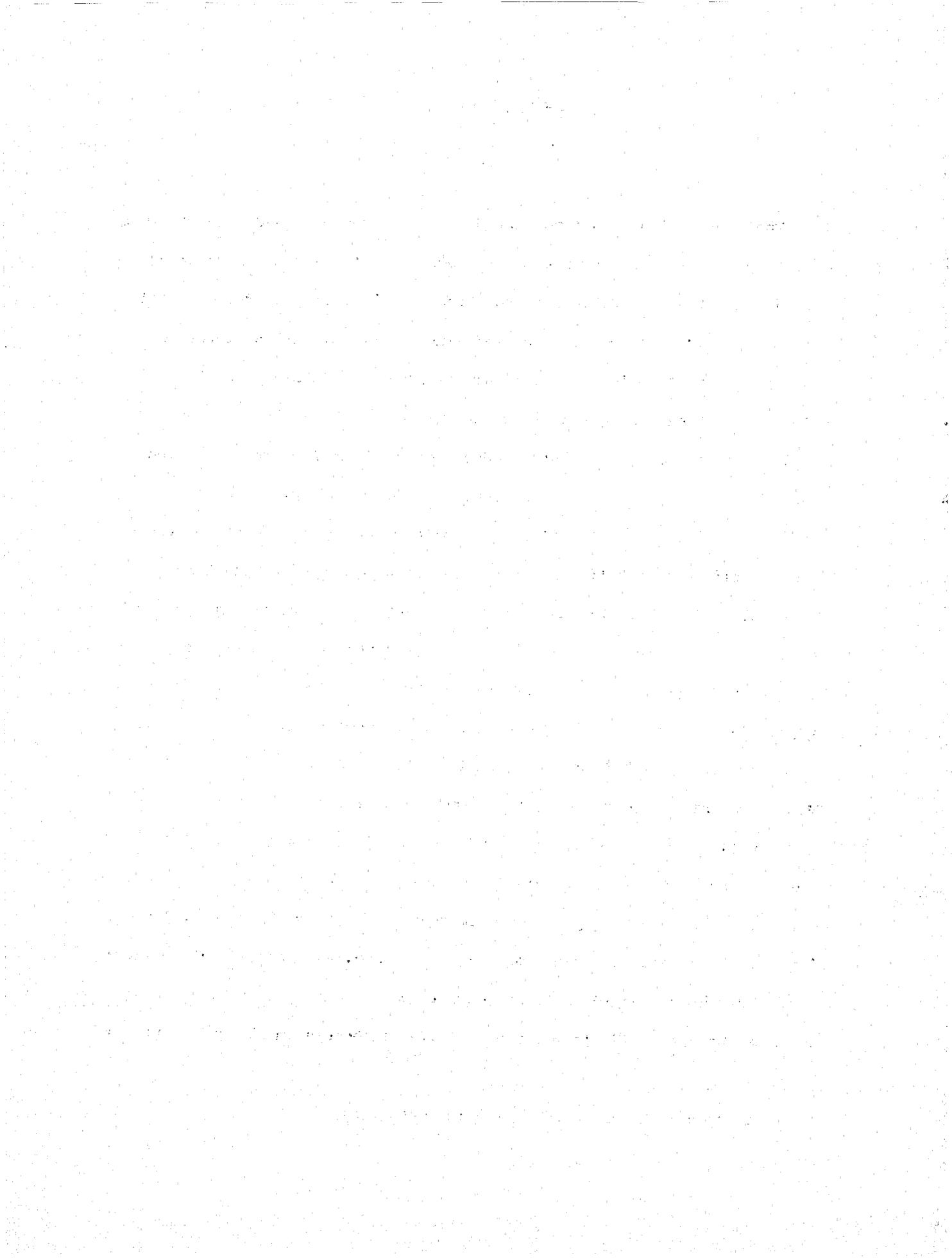
Bettors have mixed beliefs concerning the possible consequences of legalizing a numbers game. A majority believe that such legalization would result in more jobs for people, a lot more money to run the government, and less money for organized crime. About a third believe it would give the common man more of a chance to get rich. On the negative side, a majority of the players believe a legal numbers game would result in people gambling more than they could afford and in more of a chance that children will be influenced to gamble. A large minority thought more racketeers would be connected with a legal numbers game, and a fourth said they thought a legal game would result in people working less because of gambling. (Table 10.13-2)

The only subclass of people having a majority in favor of legalization of numbers is the 1974 numbers bettors, which comprises three percent of the adult population. Even among that group, over a fourth are opposed to legalization. Further, over a third of the bettors on the illegal game said they would not use a legal game if one were available. (Table 10.13-3)

The numbers bettors who initially said they would not use a legal game if one were available were subsequently asked what features were absolutely necessary before they would use the legal game. No income taxes on winnings was by far the most frequently mentioned feature. (Table 10.13-4) Almost a third of these respondents said they would use the legal game instead of the illegal game if all of the necessary features they mentioned were incorporated.

In all, only about half of the current numbers bettors said they would switch to a legal game and use it to the exclusion of the illegal

game if the necessary features were included, but eight percent of those who were not current bettors, or about 7.5 percent of the total sample, said they would bet on a legal game if one were available. In a game with a current annual handle of approximately 1.1 billion and a take-out rate of about 54 percent, that degree of participation would be sufficient to insure a profitable legal operation. With an additional 7.5 of the population introduced to a legal numbers game, however, it is possible that some of those would join the ranks of the faithful 50 percent who were unwilling to switch from the illegal game. It seems unlikely that legalization, without concentrated law enforcement aimed at illegal operators, would serve to take the illegal games out of business.



CHAPTER ELEVEN

NEVADA

The most obvious and important difference between Nevada and the rest of the country is the widespread legal availability of gambling casinos and slot machines, as well as bingo, keno, and betting parlors. For this reason we decided to do a special sampling of Nevada, with an interview containing more detailed questions about these additional types of gambling. Nevada can be considered an experiment (albeit only a semi-controlled one) for comparing the incidence of gambling and its social consequences with the rest of the nation, to predict what might happen if gambling facilities were legalized elsewhere. To control some of the problems of self-selection (i.e., people moving to Nevada precisely because of the availability of gambling) we devised a set of screening questions to exclude such persons from the sample. We attempted to limit our respondents to those people who had grown up in Nevada, or moved there for the purposes of employment, education, health, retirement, military service, and other reasons not directly related to the availability of gambling.¹ Because of this screening, our estimates of the incidence of gambling in Nevada will be low for the total Nevada population, as we have excluded those who moved to Nevada in order to gamble and who are presumably heavy gamblers. The Nevada sample should represent the "normal" types of people who live in a state with many forms of legal gambling since if gambling were legal everywhere, people would not have to move to be near them. In most instances Nevada residents and people living elsewhere in the United States

1. See Appendix E for Nevada Screening Questions.

Table 11.1-1

Reported Betting Participation
by Demographic Characteristics

		Nevada		National	
		Current Non Bettors	Current Bettors	Current Non Bettors	Current Bettors
Total Sample	%	22	78	39	61
Male	%	13	87	32	68
Female	%	30	70	45	55
White	%	21	79	38	62
Non-white	%	34	66	48	52
18-24 years	%	25	75	27	73
25-44 years	%	14	86	31	69
45-64 years	%	20	80	40	60
65 + years	%	59	41	77	23
Employed	%	13	87	29	71
Unemployed	%	24	76	31	69
Under \$5,000	%	37	63	76	24
\$5,000-\$10,000	%	26	74	49	51
\$10,000-\$15,000	%	22	78	31	69
\$15,000 +	%	15	85	26	74
Married	%	20	80	38	62
Divorced/separated	%	22	78	29	71
Widowed	%	46	54	82	18
Never married	%	22	78	30	70
Did not graduate high school	%	29	71	59	41
High school graduate	%	18	82	34	66
Some college	%	20	80	28	72
College graduate	%	22	78	21	79
Catholic	%	17	83	20	80
Protestant	%	23	77	46	54
Presbyterian, Lutheran, Congegational, Episcopal	%	8	92	26	74
Bible-oriented sects	%	18	82	67	33
Methodist	%	28	72	37	63
Baptist	%	23	77	55	45
Jewish	%	30	70	23	77
Athiest, no preference	%	45	55	60	40
West European	%	21	79	30	70
East European	%	33	67	19	81
British	%	21	79	38	62
Irish	%	21	79	35	65
Spanish speaking	%	28	72	39	61
African	%	54	46	46	54
Italian	%	8	92	23	77
All others	%	20	80	59	41

were asked the same questions. Wherever this occurs comparison tables are included.

11.1 Who Gambles in Nevada?

In Nevada 78 percent of the total sample bet on something in 1974, compared to 61 percent of the national population. The incidence of betting is higher in Nevada in almost every demographic group.

Males bet more than females, whites more than non-whites, higher income groups more than lower income groups and widowed persons bet less than those of any other marital status. All of the demographic patterns are similar to those found in the national sample, but the education and age patterns differ. In Nevada, about three fourths of the people under age 25 bet in 1974, the same proportion as in the national sample, but while the proportion of bettors declines systematically with age in the national group, in Nevada the highest proportion of bettors occurs in the 25-44 age group. Patterns of betting likewise differ by level of education in Nevada; a smaller proportion of people who did not graduate from high school bet than among the other three education groups. In the national sample, betting incidence rises sharply and consistently with education. The age, education, and income differentials in betting incidence are much lower in Nevada than they are in the national sample; in Nevada almost everyone at least plays slot machines. One Nevada respondent told the interviewer: "No, I don't gamble at all; I only play slot machines." He effectively classified himself as a "Nevada non-gambler;" to him, a gambler was someone who went to the casino tables!

In sharp contrast with the national sample, in Nevada, a combined group of four large Protestant denominations (Presbyterian, Lutheran,

Congregational, Episcopal) had the highest incidence of gambling and Jews the lowest incidence of the three major religious categories. As in the national group, Nevadans of African descent had the lowest incidence of gambling. (Table 11.1-1)

Nevadans in general grew up in more urbanized areas than the national sample, and bettors were even more likely to have large city backgrounds. On the other hand, the distribution of Nevada bettors is nearly identical to that of national bettors with regard to perceptions of childhood religious teachings. Thirty-five percent of each group of bettors was taught that "gambling is sinful," compared to 55 percent of national and 45 percent of the non-bettor groups.

Experience with the armed services and with overseas assignments are even more prevalent among Nevada bettors than national bettors. Part of this is undoubtedly due to the influence of the Air Force base near Las Vegas, which attracts military retirees as well as people on active duty. (Table 11.1-2)

When income of the respondent is considered (as opposed to family income), over half of Nevada non-bettors have incomes under \$10,000 a year, while over half of the bettors make more than \$10,000. Twice as many Nevada bettors as non-bettors make over \$15,000 a year. The number of individuals self employed is nearly equal for the two groups. Contrary to expectations (and the national pattern), non-bettors have on the average more paydays per month than bettors. More frequent paydays may in this case be a proxy for lower income, lower status, and marginal types of jobs. Nevada bettors are a little more likely than non-bettors to have two months'

Table 11.1-2

Situational Correlates of Gambling Activity
(Childhood and Early Adulthood)

	Nevada		National	
	Non Bettors %	Bettors %	Non Bettors %	Bettors %
<u>City Size Grew Up In</u>				
1 million or more	16	15	6	10
100,000- 1 million	16	19	14	20
Suburb of large city	0	6	3	9
5,000-99,999	41	39	23	32
Less than 5,000	5	13	16	12
Rural	22	8	36	17
No answer	0	0	2	0
<u>Religious Teaching</u>				
Gambling is sinful	45	35	55	35
Gambling is not desirable	25	32	18	23
No teaching, don't know	21	29	18	29
No religion	9	4	9	3
Went into service	13	36	17	28
Stationed overseas	9	21	11	17

Table 11.1-3

Financial Correlates of Gambling Activity

	Nevada		National	
	Non Bettors	Bettors	Non Bettors	Bettors
<u>Income</u>				
(Income from main job)	%	%	%	%
Under \$5,000	18	18	33	17
\$5,000-\$10,000	41	29	27	30
\$10,000-\$15,000	27	28	20	26
\$15,000+	12	25	17	23
No answer	2	0	3	4
	100	100	100	100
<u>Access to cash</u>				
Self employed	14%	13%	12%	12%
Average number of pay days	2.85	2.61	2.71	2.79
Have two months pay in cash	53%	58%	51%	68%
<u>Future Security</u>				
	%	%	%	%
Owens home	65	69	70	68
Rents home	34	31	25	28
Neither	1	0	5	4
Owens land	15	28	27	28
Owens stock	15	26	18	36
Owens bonds	31	22	23	37
Average total assets	\$43,121	\$51,783	\$15,000	\$24,000
Covered by Social Security	86%	86%	85%	89%
Has pension	45%	58%	48%	67%
Borrowed money (not mortgage)	34%	46%	28%	44%
<u>Spending style</u>				
Average spent on groceries per week	\$41	\$49	\$40	\$48
Average spent on recreation per week	\$12	\$29	\$10	\$20
Average number of vacation days in 1974	12	15	15	19
Went on vacation in 1974	70%	77%	64%	86%
Average spent on vacations	\$541	\$705	\$431	\$736

Table 11.2-1
Nevada and National Game Participation

	Lifetime		1974	
	Nevada %	National %	Nevada %	National %
Card games with friends	56.7	52.8	34.0	38.4
Lottery ticket	7.0	30.0	1.4	24.1
Professional football with friends	35.0	25.8	25.7	20.2
Bingo	54.4	43.9	24.0	18.7
Professional baseball with friends	40.5	25.7	23.2	17.7
Horse races (track)	36.3	34.6	3.2	14.8
Miscellaneous events	25.2	22.1	13.2	14.8
Pool, billards	28.2	18.3	17.1	11.3
Check pool	29.4	22.0	9.0	11.2
College football with friends	24.2	17.8	15.6	11.1
Casinos	40.2	26.7	27.3	9.6
Fights or wrestling with friends	20.9	13.7	10.9	7.7
Dice	29.4	20.8	7.2	7.6
Bowling	16.5	13.2	8.1	7.2
Professional basketball with friends	10.2	8.8	5.2	6.3
Card parlors*	11.7	11.7	4.5	5.9
Pinball	21.5	14.6	8.6	5.6
College basketball with friends	8.2	8.7	4.1	5.0
Tennis, golf with friends	7.5	6.2	4.7	4.7
Auto racing	8.7	7.1	5.2	4.1
Dog tracks	15.4	14.4	1.7	3.9
Chess, checkers, dominoes	10.2	7.2	5.6	3.7
Sports cards	4.9	3.1	3.0	3.0
Numbers	4.1	7.2	0.0	3.0
Hockey with friends	3.3	4.5	1.4	2.5
Jai lai	13.8	6.4	8.8	2.4
Horses with bookies	7.5	5.3	1.9	2.4
Elections	13.9	9.1	3.6	2.3
Professional football with bookie	5.3	3.2	2.6	1.8
Backgammon	1.4	2.0	0.4	1.4
College football with bookie	3.8	2.4	1.8	1.1
College baseball with friends	4.4	2.7	1.2	1.1
Professional baseball with bookie	2.9	1.9	0.7	0.8
Fights or wrestling with bookie	1.7	1.2	0.2	0.6
Off track betting (legal)	9.7	0.8	6.0	0.6
Mahjong	1.2	1.2	0.4	0.5
Professional basketball with bookie	2.7	1.0	1.2	0.5
College basketball with bookie	2.0	0.6	0.7	0.4
Hockey with bookie	0.8	0.7	0.0	0.3
College baseball with bookie	1.4	0.2	0.4	0.1
Tennis or golf with bookie	0.0	0.2	0.0	0.1
Keno	71.3	--	54.2	--
Sports parlor	10.1	--	8.2	--
Slot machines	82.2	--	72.1	--

*Legal in Nevada and parts of California; illegal elsewhere.

pay in cash on hand. The differential is much smaller than for the national sample bettor and non-bettor groups.

Future security is measured by a number of variables. It was expected that those people whose future security is assured by ownership of real estate and other assets, by social security, and by pensions would feel freer to use current income for risk-taking (gambling) activities, compared to those people who do not have a financial cushion. Home ownership levels and patterns are similar across all groups. Nevada non-bettors are much less likely to own property compared to Nevada bettors and the national sample. There is somewhat less stock ownership overall in Nevada than in the rest of the country. In both places, more bettors than non-bettors own stock. Bond ownership patterns are reversed between Nevada and the national sample. Social security coverage is virtually identical. Both Nevada and national bettors are more likely than non-bettors to have at least two months' savings, and also pensions; but fewer Nevada bettors have them. More bettors of both kinds have non-mortgage debt. In sum, Nevada bettors do seem to have greater present and future financial security than non-bettors; but the differences are generally not as great as those between national bettors and non-bettors.

With respect to spending style, Nevada bettors were more free with money. They spent more on groceries and recreation, took more vacations, and spent more on them, than non-bettors. These patterns are parallel to the national ones. (Table 11.1-3)

When we consider access to cash, future security, and spending style, we find that our hypotheses about their relationship to Nevada bettors and

non-bettors generally hold up. The higher income of bettors may be the most direct cause of greater financial security and higher spending levels, both of which are correlated with gambling. Finally, the pattern of financial variables is similar to that of the demographic ones; that is, in Nevada, bettor and non-bettor groups generally do not differ from each other as much as the national groups do. Gambling is much more universal in Nevada; nearly everyone does it. As other data will suggest, the major barrier to gambling participation in Nevada seems to be lack of money.

11.2 Participation

Considering 1974 participation rates for 40 games or betting activities (Table 11.2-1) we see that 72 percent of Nevadans played slot machines and 54 percent played keno, 34 percent played cards with friends (compared to 38 percent of the national sample), and 27 percent went to casinos (10 percent of the national sample). Other betting games which are reported as played more frequently in Nevada than in the rest of the nation include betting on professional football and baseball with friends, bingo, pool, and jai alai. Those forms of betting which are much less frequent in Nevada are lottery tickets, horse tracks, and numbers; no one in Nevada claimed to have played the numbers in 1974.

In general, there is much less illegal gambling in Nevada than in the nation as a whole. Figure 11.2-1 shows the general increase in illegal gambling participation with increasing numbers of legal facilities. Fully 22 percent of people bet illegally where there are three or more legal facilities (New York and New Jersey), but the incidence falls to four percent

Table 11.2-2

Lifetime and 1974 Distributions of Bettors Among Betting Channels
by Age

	<u>Total</u>		<u>18-24</u>		<u>24-44</u>		<u>45-64</u>		<u>65+</u>	
	<u>Life</u>	<u>74</u>	<u>Life</u>	<u>74</u>	<u>Life</u>	<u>74</u>	<u>Life</u>	<u>74</u>	<u>Life</u>	<u>74</u>
	%	%	%	%	%	%	%	%	%	%
<u>Nevada</u>										
Illegal	15	6	2	0	15	10	19	2	24	0
Legal commercial	85	92	98	96	85	88	80	97	76	100
Friends only	0	2	0	4	0	2	1	1	0	0
<u>National</u>										
Illegal	24	13	16	13	23	15	29	11	29	4
Legal commercial	71	68	71	63	73	67	68	71	66	77
Friends only	5	19	13	23	4	18	3	18	5	19
Nevada illegal	.40		0		.67		.11		0	
National illegal	.54		.81		.65		.38		.14	

in Nevada where practically all forms of betting are legal.

When betting patterns by age are examined for Nevada and compared to the national sample, several things are apparent. (Figure 11.2-2) First of all the proportion of bettors in all age groups over age 25 is higher in Nevada than elsewhere. Second, the same proportion of Nevadans under age 25 bet as their national counterparts. Third, the incidence of betting in Nevada is highest in the 25-44 age group while the national age pattern shows highest betting incidence is found among people under age 25. Fourth, betting incidence declines after age 65 in Nevada, and even more sharply among the national sample.

Table 11.2-2 gives the lifetime and 1974 distribution among betting channels for bettors only by age.¹ It shows that in 1974, the proportion of illegal bettors was twice as great in the nation as it was in Nevada. But this proportionality did not hold across all age groups. The only age group which engaged in considerable illegal betting in Nevada was the 25 to 44 year age group where 10 percent of all their bets were illegal bets. In all other age groups, illegal betting was virtually non-existent in Nevada.

Also, there was very little "friend only" betting in Nevada in 1974 among any of the age groups. Whereas nearly 20 percent of the national sample of bettors bet with friends only, only 2 percent in Nevada did, and they were mostly young people.

-
1. People who reported betting were classified according to the following priority order:
 - 1) Bet illegally (may also have bet legal commercially and/or with friends)
 - 2) Bet legal commercially (may also have bet with friends; did not bet illegally)
 - 3) Bet with friends only (bet neither illegally nor legal commercially)Games which are legal in Nevada but not elsewhere are included as legal commercial for Nevada and included as illegal in the national figures. Nevada casinos are included as legal for both samples.

Figure 11.2-1

Illegal Gambling Participation by Number of Legal Facilities

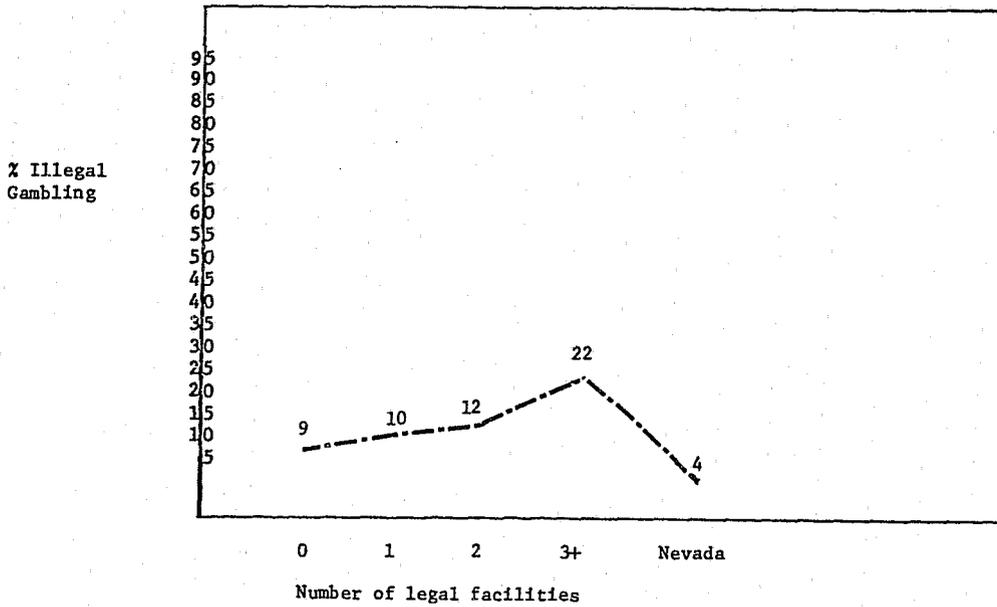
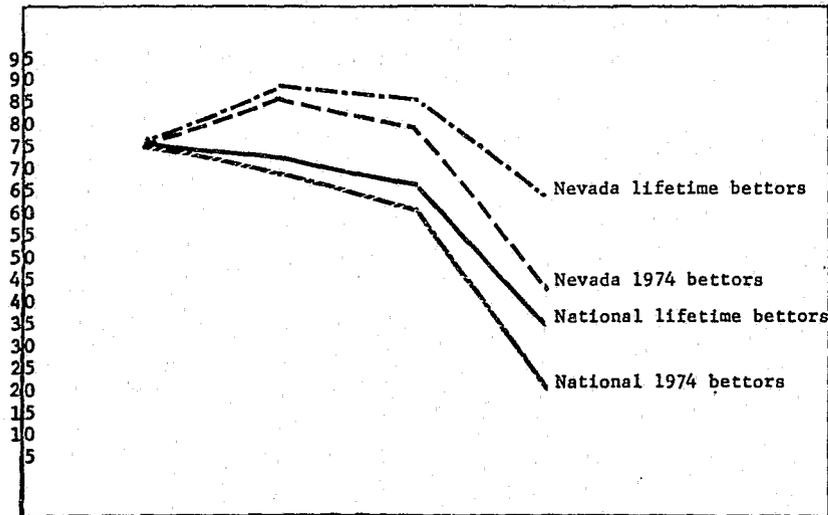


Figure 11.2-2

Reported Betting over the Last 50 Years



Age Range	18-24	24-44	45-64	65-over				
Midpoint	20	35	55	70				
Year group was 20	1975	1960	1940	1925				
	<u>Nev.</u>	<u>Natl.</u>	<u>Nev.</u>	<u>Natl.</u>	<u>Nev.</u>	<u>Natl.</u>	<u>Nev.</u>	<u>Natl.</u>
Lifetime Participation	75%	75%	87%	74%	86%	68%	65%	35%
1974 Participation	75%	73%	86%	69%	80%	60%	41%	23%
Loyalty Ratio ^(a)	1.00	.97	.99	.93	.93	.88	.63	.65

(a) Proportion who have ever bet who bet in 1974

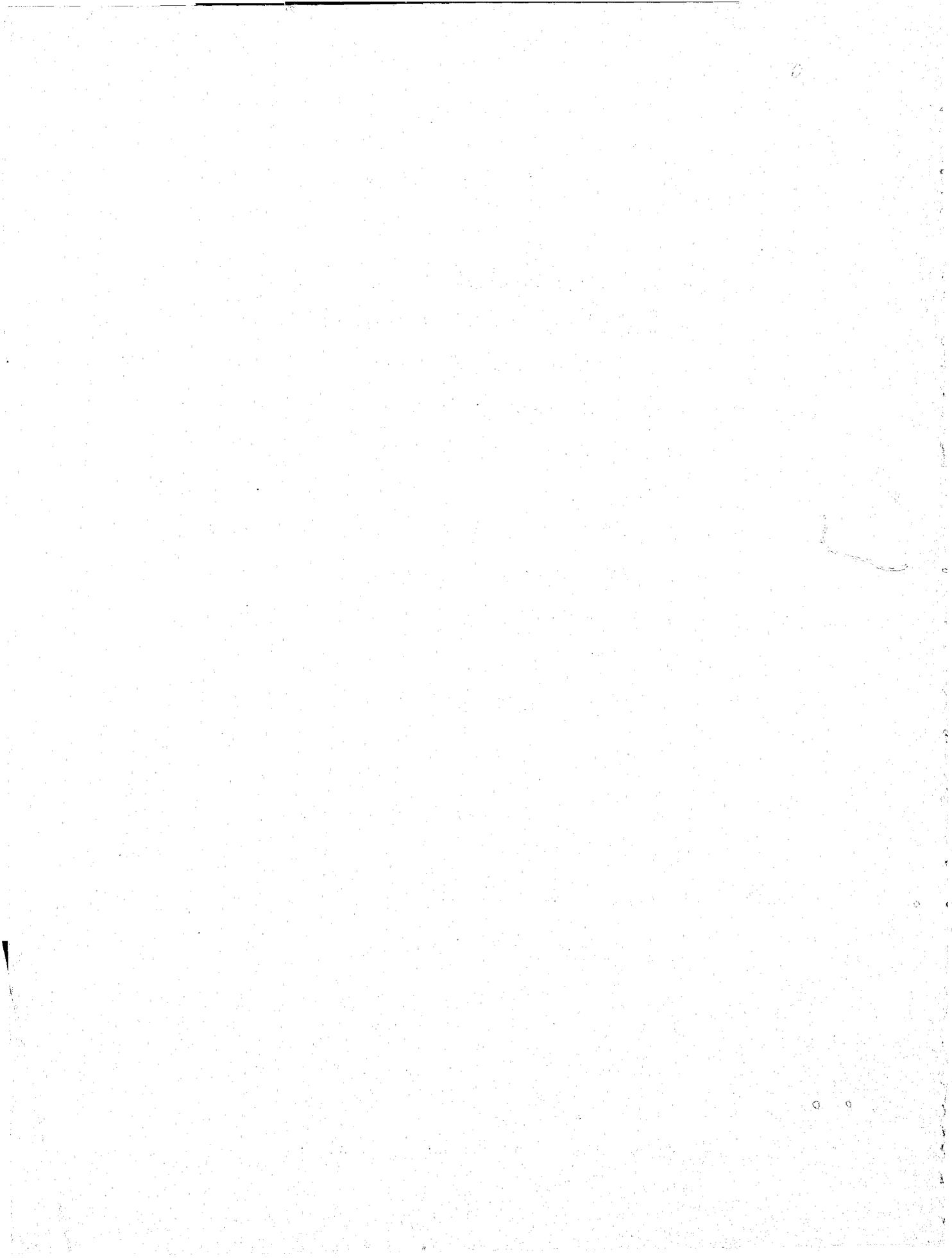


Table 11.3-1

Major Reasons Reported for Gambling on Nine Games*

	Horses at Track		Casinos		Sports with Friends		Bingo		Lottery		Sports at Betting Parlors or with Bookies		Horses at Betting Parlors or with Bookies		Keno	Slots
	Nev. %	Nat. %	Nev. %	Nat. %	Nev. %	Nat. %	Nev. %	Nat. %	Nev. %	Nat. %	Nev. %	Nat. %	Nev. %	Nat. %	Nev. %	Nev. %
<u>Specific reasons</u>																
Have a good time	74	86	58	78	64	63	57	62	18	15	54	48	41	33	47	60
Excitement	46	51	28	46	41	46	15	27	22	23	43	38	30	35	17	25
Challenge	23	40	43	41	43	50	15	20	57	33	47	67	40	39	24	27
Make money	35	33	56	36	34	27	34	19	41	55	64	56	59	66	46	41
Chance to get rich	1	7	11	7	2	2	7	3	25	40	5	8	4	13	21	5
Pass the time	18	13	31	26	22	18	51	37	19	7	16	10	17	5	53	54
Something to look forward to	9	16	6	13	32	31	12	14	26	40	25	26	15	2	7	8

*Respondents chose one, two, or three reasons from a list of 11 reasons provided.

The inescapable conclusion is that in Nevada virtually everyone bets with the legal commercial facilities, which apparently serve as substitutes for both illegal betting and betting with friends.

It is also interesting to look at the lifetime illegal betting participation. Remember that in the Nevada sample, only numbers and bookie bets on horses and sports are counted as illegal; the figures for Nevada lifetime illegal betting are therefore conservative estimates because the respondent who bet on sports cards (legal in Nevada) could have lived elsewhere where, at the time, they were illegal. Nevertheless, lifetime illegal betting in the national sample rises from 16 percent in the youngest group up to 29 percent in the oldest, while in Nevada only 2 percent of the youngest bettor group reported any illegal betting, and the proportion rises sharply to 24 percent of the oldest bettor group. This suggests that in spite of our screening, there are a fair number of people in our sample who used to bet illegally and for whom the ready availability of legal betting opportunities represented an incentive for living in Nevada. Or alternatively, it could mean that the level of illegal gambling in Nevada used to be much higher.

Another indication of substitutability is the relative holding power of illegal betting which measures the proportion of lifetime illegal bettors who continue to bet illegally in 1974. For Nevada it is 40 percent, compared to 54 percent for the nation. In all but one age group, the holding power of illegal gambling in Nevada is significantly lower than in the national sample. This may suggest that former illegal gamblers have switched to something else, namely legal commercial gambling, as a substitute. Again, the 25 to 44 year age group is an exception. These people

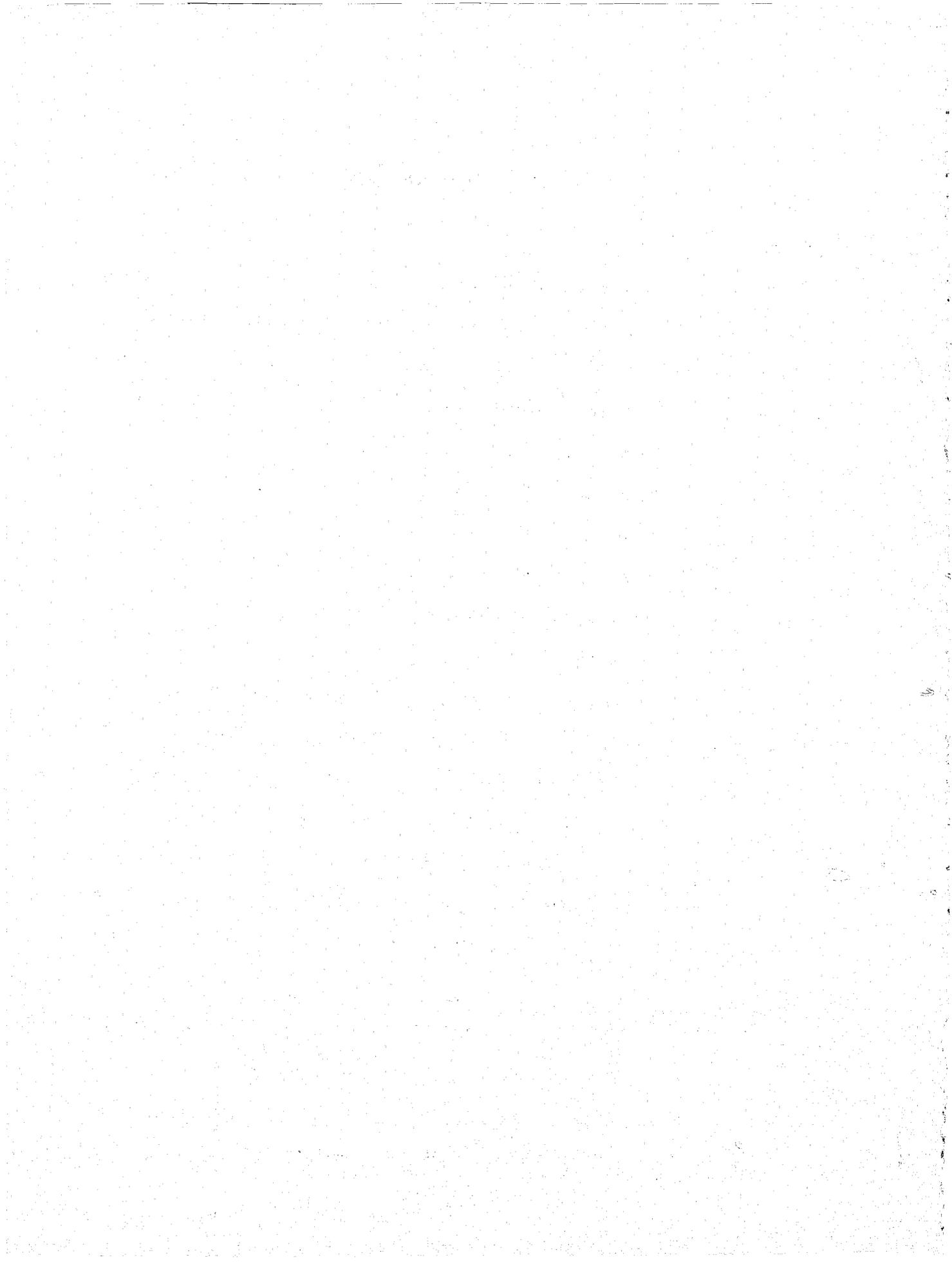


Table 11.3-2

Major Reasons Reported for Not Gambling on Ten Games**

Specific reasons	Horses at Track		Casinos		Sports ^a		Bingo		Lottery		Sports at Betting Parlors or with Bookies		Horses at Betting Parlors or with Bookies		Numbers		Keno	Slots
	Nev. %	Nat. %	Nev. %	Nat. %	Nev. %	Nat. %	Nev. %	Nat. %	Nev. %	Nat. %	Nev. %	Nat. %	Nev. %	Nat. %	Nev. %	Nat. %	Nev. %	Nev. %
Don't know about it	41	42	27	27	28	36	11	10	35	29	41	40	21	35	36	45	23	3
Don't think about it	43	37	31	22	49	39	46	45	27	37	50	36	38	31	38	34	24	22
It's not available	12	9	*	14	*	*	3	5	32	3	2	10	8	14	34	*	1	*
Not interested	46	36	47	26	44	33	75	72	39	31	33	28	40	22	40	47	55	26
Other things to do	35	41	43	23	46	42	62	63	32	26	47	30	35	21	35	32	37	31
Waste of time or effort	6	6	8	6	13	11	22	24	7	7	10	8	16	9	10	10	12	7
Odds against you	15	21	20	22	5	8	6	10	11	21	12	19	8	19	10	17	17	12
Waste of money	17	19	21	14	10	18	13	13	10	16	15	17	9	12	12	16	18	21
Don't want to lose money	24	18	35	16	15	14	10	8	9	11	24	15	22	14	7	9	15	36
Don't disobey the law	4	9	*	9	2	14	*	1	11	15	4	21	8	21	11	19	*	*
Might get arrested	2	4	1	4	4	5	*	1	7	5	2	12	5	14	7	9	*	*

**Respondents chose one, two, or three reasons from a list of 18 reasons provided.

*Less than one half of one percent.

^aQuestion asked of all people who did not bet on sports of any kind.

just do not exhibit the same patterns observed among other bettors.

11.3 Reasons Why/Why Not

In Nevada, the distributions of reasons for gambling vary according to the game. (Table 11.3-1) Over half of the people who played keno or slot machines or bingo, said it was merely "to pass the time", and relatively few said they played keno or bingo for the "excitement" or "challenge."

Alternatively, the major reason for betting on horses at the track, or on sports with friends was "to have a good time." Over half of casino bettors also gave that reason, but two thirds of them said they played casino games to get rich or make money. In fact, Nevada bettors were more likely than national bettors to give money-related reasons for gambling for all games considered.

The reasons for not gambling are spread among "lack of interest," "lack of knowledge," and competing activities. Nevadans are also much more concerned than the national sample about losing their money on different gambling games that they do not bet on. (Table 11.3-2) This pattern carries over to the total non-gamblers, who were asked in general why they did not gamble. The most frequent answers among Nevadans were that it was a waste of money, they did not want to lose money, or they did not have the money. (Table 11.3-3) In contrast, a lot more national non-gamblers said it was sinful or wrong.

In general, monetary reasons for gambling and non-gambling appear to be foremost in the minds of Nevada residents. The ready availability of all types of gambling facilities in Nevada means that only the morally opposed (a very small number) and those financially unable fail to take advantage of them. Nevadans are much less likely than the national sample

Table 11.3-3

Major Reasons Why Non-Gamblers Report They Don't Gamble**

	Non-Gamblers			
	Total		First	
	Reasons		Reasons	
	Nev. %	Nat. %	Nev. %	Nat. %
<u>Specific reasons</u>				
Not interested	43	44	9	27
It's sinful	25	40	10	24
Other things to do	33	38	17	35
Waste of money	50	37	13	24
It's wrong	11	34	3	24
Don't know about it	35	31	13	27
Don't want to lose money	44	26	12	16
Don't think about it	23	26	3	24
Don't have the money	44	25	12	18
Odds against you	22	23	6	13
Don't disobey the law	*	21	*	19
Waste of time or effort	18	16	*	12
It's bad for people	11	9	*	*
Wasn't raised that way	3	9	*	*
Don't believe in it	4	9	*	*
Bad for family	10	8	*	1
Might get arrested	*	7	1	6
Not lucky	7	6	*	5
People get nasty	7	6	*	5
Causes corruption	*	5	*	*
It's shoddy	2	3	*	2
Not available	*	2	*	2
Too risky	2	2	*	*
Don't trust the game	*	1	*	*

*Less than one half of one percent.

**Respondents chose one, two, or three reasons from a list of 18 reasons provided.

to regard gambling as a mere recreational activity. Having a good time is the most frequent reason, but close behind is a desire to make money and to win big. As we shall see later, Nevadans also spend much more money on gambling than people in the rest of the country. The very magnitude of per capita gambling makes it a serious venture; many people seem to regard their gambling activity as an "investment" of sorts, or as a secondary occupation.

11.4 Exposure and Availability

As in the national sample, Nevada bettors had higher childhood exposure rates than non-bettors to any kind of gambling. (Table 11.4) Interestingly, when we compare the childhood exposure of Nevada bettors to that of national bettors, it is lower. A higher percent of national bettors than Nevada bettors had high childhood exposure to any kind of gambling. Nevada and national non-bettor childhood exposure rates are very similar.

When we look at current exposure rates, Nevada bettors are of course exposed to more gambling of all types than non-bettors. Comparing the national and Nevada current exposure rates of bettors, we see that they are nearly identical. Nevada non-bettors are currently exposed to somewhat more gambling than national non-bettors.

11.5 Situational Correlates

Nevada bettors and non-bettors seem to differ less from each other on a number of situational measures compared to national bettors and

Table 11.4

Indices of Exposure and Availability by Current Betting Behavior

	Nevada		National	
	Non Bettors %	Bettors %	Non Bettors %	Bettors %
<hr/>				
<u>Exposure in childhood to at least quite a lot of people who engage in: ^a</u>				
Any kind of gambling	8	13	7	16
Gambling among friends	16	22	16	24
<u>Exposure today to at least quite a lot of people who engage in: ^a</u>				
Any kind of gambling	15	28	11	29
Gambling among friends	20	37	12	37

^a See pages four and five of Appendix D: Questionnaire for data used in development of indices. Indices are an average of the top two points of the scale (most people and quite a lot of people) over 13 games and 3 games, respectively.

Table 11.5-1

Family Problems and Gambling Behavior

	Nevada		National	
	Non Bettors	Bettors	Non Bettors	Bettors
Divorced/separated	11.5%	11.9%	4.9%	7.8%
Disagreement on money matters (5 point scale)	2.12	2.18	2.38	2.43
Spouse doesn't understand me	10.9%	10.8%	8.3%	9.6%
Average number of times married	1.45	1.55	1.23	1.08
Children have more problems than others	4%	4%	2%	5%
Have a religious preference	69	53	75	70
Attend religious services				
At least once a week	42	16	47	27
Less than once a week	22	42	30	50
Do not attend	36	41	23	23

Table 11.5-2

Job Problems and Gambling Behavior

	Nevada		National	
	Non Bettors	Bettors	Non Bettors	Bettors
Job dissatisfaction	32%	23%	14%	17%
Days of work missed in 1974	4	5	7	7
Days late to work in 1974	2.1	2.7	1.7	4.5
Number of jobs in last 3 years	1.6	1.8	1.6	1.5
Wages have been garnisheed	0.0%	0.0%	0.3%	1.2%

Table 11.5-3
Mobility and Gambling Behavior

	Nevada		National	
	Non Bettors	Bettors	Non Bettors	Bettors
Average Times moved in last three years	1.2	1.4	.60	.68
Average length of current residence	5 yrs.	5 yrs.	11 yrs.	8 yrs.
Would move out of city if could	31%	28%	31%	37%
Would move out of state if could	25%	28%	21%	31%

Table 11.5-4
Alcohol Consumption and Gambling Behavior

	Mean Days of Alcoholic Consumption Other than at Meals**	
	Nevada	National
Total population	60	44
Non-bettors	26	17
Bettors *	69	61
"Light"	68	56
"Average"	64	65
"Heavy"	101	83

* Definitions:

	Nevada		National	
	Dollars Bet Per Year	% of Total Sample in This Range	Dollars Bet Per Year	% of Total Sample in This Range
"Light"	\$1-399	50.8	\$1-49	24.4
"Average"	\$400-999	10.4	\$50-199	8.6
"Heavy"	\$1000+	31.4	\$200+	6.2

**Includes those who do not drink alcohol.

non-bettors. (Table 11.5-1) There is a greater percentage of divorced and separated people in Nevada than in the nation as a whole, but the rate is only slightly higher for bettors than for non-bettors. Note the large difference between bettors and non-bettors in the national sample with respect to incidence of divorce or separation. Similarly, the average number of times married for all Nevadans is higher than for the rest of the country; but the difference between bettors and non-bettors is not great. With respect to two other measures of family stability (expression of lack of understanding by spouse and perception of children having more problems than others), Nevada bettors and non-bettors are virtually identical, but both tend to be more like national bettors than national non-bettors.

There are, however, large differences between bettors and non-bettors, between Nevada and the rest of the country, in religious preference and church attendance. Seventy percent of the national bettors have a religious preference, compared to 53 percent of Nevada bettors. Among those with a religious preference, Nevada residents attend less often than people from other parts of the country.

Job Problems. In addition to familial consequences, we investigated the potential negative effects on jobs for those respondents who were employed. A greater percentage of Nevadans than people in the rest of the nation expressed dissatisfaction with their jobs, and non-bettors were most likely to say their jobs were "not very much like" the sort of job they wanted. (Table 11.5-2) The general dissatisfaction may well be a function of the types of jobs actually available in Nevada (a lot of military jobs, for instance, or unskilled, menial service jobs in the gambling industry) rather than of

the availability of gambling. One other measure, number of days late to work, suggests a gambling-related problem on the job for Nevada as in the rest of the nation. All other measures: days of work missed, number of jobs in last three years, and frequency of wage garnishment, differ little from national figures, and differ little between Nevada bettors and non-bettors.

Mobility. Other measures of situational instability involve the frequency of past moves and desired future moves. All Nevadans, bettors and non-bettors alike, have moved more often than the national sample and have much shorter average lengths of residence. (Table 11.5-3) There is little difference in the proportions of bettors and non-bettors who would move out of the city or state, although bettors in the national sample were much more inclined to want to move than non-bettors. What is more interesting is the comparison of Nevada and the national sample since these questions were intended to explore the possible dissatisfaction attendant upon being in a state with so many gambling facilities. The findings suggest that this general dissatisfaction is not present.

Finally, we looked at number of days of alcohol consumption in Nevada compared to the national sample for bettors and non-bettors, on the theory that alcohol consumption and gambling are related. The average number of days of alcohol consumption exclusive of beer or wine drunk with meals in the total Nevada population (including non-drinkers) was 60 days compared to 44 days for the national groups. Both Nevada non-bettors and bettors averaged more alcohol days than their national counterparts. Nevada bettors drank much more often than non-bettors. In many casinos, anyone

playing table games is served free drinks. In the national sample, "heavy" bettors had about 50 percent more alcohol days than "light" bettors. The same pattern is visible, but at a higher level, among the Nevada bettors. Note that the definitions of "light," "medium," and "heavy" bettors are relative to the sample, and represent widely different dollar amounts; a "light" Nevada bettor can be equivalent in yearly dollar amount bet to a "heavy" national bettor. (Table 11.5-4)

In terms of all these situational correlates, in Nevada, bettors and non-bettors generally are much more similar to each other than the national bettor and non-bettor groups are. Religious preference and attendance and alcohol consumption are the two variables that seem to sharply distinguish Nevada bettors from non-bettors. Religious affiliation is undoubtedly related to both gambling behavior and alcohol consumption.

11.6 Needs and Need Fulfillment

The relative importance of different needs is similar in Nevada to the national sample; "control over one's own life" is rated most important on the average while "power" is least important. (Table 11.6) In Nevada, bettors say they need the following attributes more than non-bettors: "control over life," "success," "money," "chances to get ahead," "savings," "challenges," "time for recreation," "luck," "excitement," and "power." Nevada bettors say they need fewer "well-mannered associates." This pattern compares to the national, where bettors say they need more of everything than non-bettors, except "well-mannered associates," where they need the same.

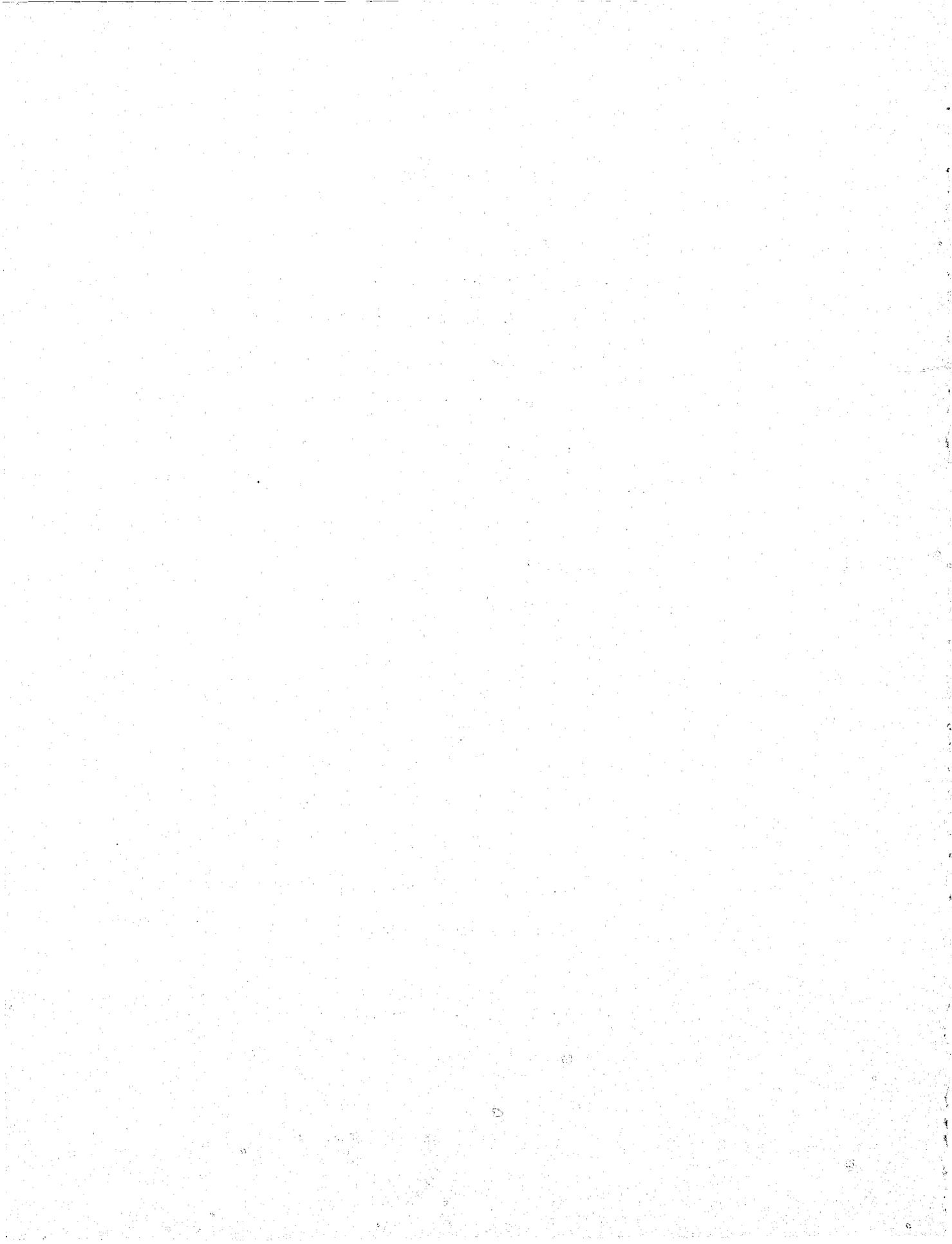


Table 11.6

Needs and Need Fullfillment

	Mean Need ^a				Need Fullfillment ^b			
	Nevada Non Bettors	National Non Bettors	Nevada Bettors	National Bettors	Nevada Non Bettors	National Non Bettors	Nevada Bettors	National Bettors
Control over own life	5.9	5.5	6.5	6.1	-1	-3	-8	-5
Close, comfortable relationships	5.7	5.6	5.9	6.0	-3	-1	-3	0
Interesting things to do	5.9	5.3	6.0	6.0	-10	-3	-5	-6
Things to look forward to	5.9	5.4	5.8	5.9	-5	0	-2	-1
Well mannered associates	6.2	5.5	5.9	5.9	-12	-3	-5	-2
Success	5.0	5.0	5.9	5.9	-7	-4	-8	-3
Money	4.8	4.8	5.7	5.7	-11	-11	-16	-11
Chances to get ahead	5.0	4.7	5.7	5.4	-3	-6	-15	-5
Savings	5.0	4.7	5.5	5.3	-18	-14	-20	-15
Challenges	5.0	4.3	5.6	5.4	-7	-1	-4	-2
Time for recreation	4.4	4.2	5.5	5.2	0	-1	-8	-5
Hard work	4.6	4.4	4.7	4.5	+9	+8	+9	+13
Luck	3.1	3.6	4.1	4.2	+6	-1	-5	-2
Excitement	3.2	2.8	4.4	4.2	0	+9	+4	+4
Power	2.7	2.8	3.5	3.4	+1	0	-1	0

^a See pages 55 and 56 of Appendix D: Questionnaire. Scale: 1(not at all ___) to 8(very ___).

^b Derived by subtracting "need" from "have" scores and multiplying by 10 for ease of presentation.

Table 11.7-1

Perceptions of Luck and Skill Involved in 13 Gambling Activities

	More Luck Than Skill				Equal Luck And Skill				More Skill Than Luck				
	Nevada		National		Nevada		National		Nevada		National		
	Non	Bettors	Non	Bettors	Non	Bettors	Non	Bettors	Non	Bettors	Non	Bettors	
	%	%	%	%	%	%	%	%	%	%	%	%	
Horses at track	63	50	45	51	18	28	21	30	12	20	13	17	
Off-track horses	58	50	45	53	20	20	27	16	25	10	17	11	16
Bingo	82	91	66	87	6	5	10	10	6	1	6	2	
Lottery	78	89	66	92	6	5	6	4	6	2	5	1	
Numbers	58	75	48	73	14	7	11	7	6	4	7	6	
Slot machines	87	95	89	65	5	2	6	5	5	3	7	3	
Casinos	62	55	46	57	18	28	15	25	16	15	15	15	
Sports cards	55	51	42	52	13	24	13	22	11	15	10	21	
Sports--bookie	58	51	45	51	16	24	12	24	12	16	11	16	
Sports--friends	51	46	45	44	12	30	16	33	20	17	11	19	
Card games with friends	41	26	32	23	17	35	22	37	34	36	25	37	
Dice	69	67	70	50	14	18	12	14	11	10	11	11	
Dog tracks	67	58	46	58	11	21	16	21	9	15	9	14	

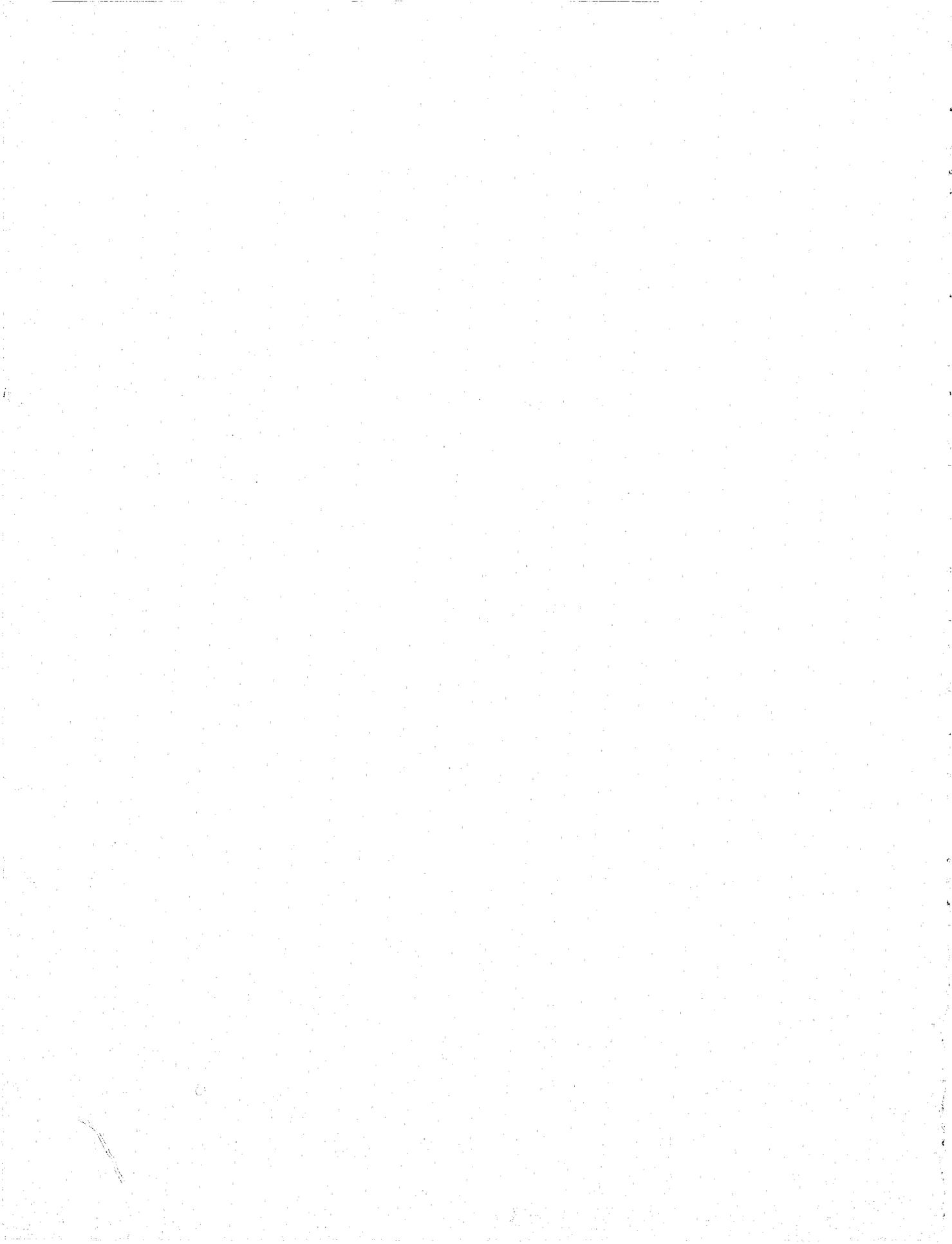


Table 11.7-2

Excitement Ratings for 13 Gambling Activities

Excitement level of:	Nevada		National	
	Non Bettors	Bettors	Non Bettors	Bettors
Horses at track	3.1	4.1	2.6	4.8
Cards with friends	2.7	3.9	2.4	4.5
Slot machines	2.7	4.3	2.3	4.2
Casinos	2.4	4.4	2.1	4.1
Bingo	2.5	2.9	2.6	3.6
Sports with friends	2.2	3.4	2.1	3.8
Dog tracks	1.9	2.6	2.1	3.2
Dice	1.8	3.1	1.9	2.9
Lottery	1.5	1.9	2.1	3.3
Sports card	1.4	2.1	1.6	2.2
Sports bookie	1.3	1.9	1.5	1.9
Horses off track	1.3	1.9	1.6	2.3
Numbers	1.2	1.3	1.5	1.7

Scale: 1(not at all exciting) to 8(very exciting).

Table 11.8

Perception of Fixing (Means Ordered from Least to Most)

	Nevada		National	
	Non Bettors	Bettors	Non Bettors	Bettors
High school sports	4.27	4.59	4.30	4.49
Bingo	4.11	4.45	3.58	4.01
College sports	3.81	4.08	3.73	3.94
Lottery	3.42	4.05	3.00	3.81
Casinos	3.30	3.89	2.13	2.41
Professional sports	3.30	3.61	3.24	3.45
Dog races	3.13	3.60	2.75	2.90
Numbers	3.07	3.07	1.92	2.07
Horse races	2.87	3.51	2.69	2.99
Slot machines	2.85	3.23	2.17	2.44

Scale: 1 = fixed most of time; 2 = fixed pretty often; 3 = fixed some-times; 4 = almost never fixed; 5 = never fixed.

Both Nevada bettors and non-bettors say they have more "hard work" than they need, which parallels the national pattern. Nevada bettors also have more "excitement" than they need, while non-bettors say they have the right amount. Bettors reported having less "luck" than they need, while non-bettors felt they have more "luck" than they need.

Both bettors and non-bettors had a lot less "money" and "savings" than they wanted; bettors also reported needing more "chances to get ahead." Non-bettors had a higher unresolved need for "interesting things to do" and well-mannered associates." Bettors indicated unrealized needs for "control over their own life" and "time for recreation."

Looking at the patterns of need discrepancies across all four groups (Nevada and national, bettors and non-bettors), we can see that everyone says they have a lot more "hard work," and a lot less "money" and "savings," compared to their desired levels. Nevada non-bettors express greater unfulfillment with regard to "interesting things to do" and "well-mannered associates" than the other groups but curiously, they say they have more "luck" than they need. The other groups have less "luck" and more "excitement" than they want. Nevada bettors say they feel especially unfulfilled on "control over their life," "chances to get ahead," and "time for recreation." National bettors have much more "hard work" than they want compared to the other groups.

11.7 Perceptions of Luck and Skill and Excitement

Expressed perceptions of the amount of luck versus skill needed to win at gambling vary across the type of game for bettors and non-bettors in

Table 11.9-1

Average number of Days on Which Activities are Engaged
(Participants Only)

	Nevada Bettors	National Bettors
Read newspapers, magazines	242	233
Watch television	241	217
Relax, day dream, do nothing	132	117
Read books	127	110
Knit, sew	127	93
Home improvements, gardening	95	89
Socialize with friends and relatives	82	78
Drink alcohol (except with meals)	82	78
Do arts and crafts	70	49
Participate in active team sport	49	55
Church activities	48	58
Participate in active non-team sport	48	55
Fish, hunt, camp, boat	38	45
Nightclubs, bars, parties	34	33
Attend sports events	29	32
Community activities	23	23
Movies, theatre	22	20
Opera, lectures, museum	9	12

Nevada (Table 11.7-1) Both groups said that bingo, lottery, numbers, and slot machines took mostly luck. Card games with friends and betting on horses at the track had the largest numbers who said mostly skill was involved, but the numbers are small even here.

These differential perceptions of luck and skill may be more a function of greater familiarity with gambling games on the part of bettors than a reflection of opinions. Non-bettors tend to give a lot more "don't know" answers.

Nevada bettors consistently rate games as more exciting than non-bettors do; this is the same pattern exhibited by national bettors and non-bettors. (Table 11.7-2) Sports with a bookie, sports cards, horses off-track, and numbers rank lowest on excitement levels among all groups.

Not unexpectedly, Nevada bettors rate casinos the most exciting game, with slot machines a close second. (Table 11.7-2) Horse tracks and cards with friends were rated first and second most exciting by national bettors; they rank third and fourth respectively in Nevada. Thus the same four games are ranked highest in excitement level both in Nevada and the national group. The relative positions are undoubtedly related to their comparative availability. National bettors might conceivably rank casinos and slot machines as more exciting if they had more experience with them.

11.8 Perception of Fixes

Nevadans in general believe that all games are much less likely to be fixed than people in the national sample do. The average "likelihood of fixing" score for both bettors and non-bettors of each type of game is

Table 11.9-2

Average Number of Days on Which Activities are Engaged
(Bettors of Individual Games)

	Nevada	National
<u>Betting game</u>		
Slot machines	49	n.a.
Cards with friends	43	25
Dice with friends	42	18
Pool, billiards	30	31
Casino games	28	7
Keno	24	n.a.
Check pool	24	29
Sports with bookie	21	28
Bowling	19	22
Bingo	18	13
Sports with friends	18	n.a.
Backgammon	14	10
Dog track	13	10
Any event	13	10
Sports parlor	10	n.a.
Sports cards	8	10
Pitball	8	19
Checkers, chess, dominoes	8	10
Jai Lai	7	5
Horses--parlor	7	28*
Auto racing	6	9
Horses--bookie	5	29
Cards--parlor	5	26
Mahjong	3	27
Horse track	2	7
Numbers	0	71

*OTB in New York

n.a. = not asked

lower in Nevada than the nation as a whole while the relative ranking of the different games on the fixing score is the same in Nevada, with one important exception. (Table 11.8) Casinos are rated higher on the non-fixed end of the scale in Nevada. Whereas the national sample judged casinos to be second to last behind numbers in terms of the likelihood of those games being fixed, Nevadans rate casinos the fifth most honest game, behind college and high school sports, bingo, and lotteries. Familiarity with casinos and some measure of trust in the State Gaming Control Board may contribute to their confidence. They may be aware that even honest casinos can make a lot of money.

11.9 Gambling as a Leisure Time Activity

Gambling is often described as a type of recreation or leisure time activity. Table 11.2-1 showed the incidence of a number of different gambling activities in Nevada and in the nation as a whole. We will now look at the participants in each game and compare the average number of days they play that particular game. These averages can then be compared to the average number of days other leisure time activities are engaged in by bettors.

For the most part, Nevada bettors who engage in leisure activities participate more days a year than bettors in the rest of the country, but the relative rankings of participation frequency are nearly the same for Nevada and the national sample. (Table 11.9-1) Thus Nevada bettors read newspapers and magazines, watch TV, relax, read books, knit or sew, and do arts and crafts more often than their national counterparts. They spend less time in church activities, and somewhat less time on active sports and on fishing, hunting, camping, and community activities.



Table 11.10-1

Distribution of Index of Favorability*

	Total Population %	State Laws					1974 Participation			
		No Legal Facilities %	One Legal Facility %	Two Legal Facilities %	Three Legal Facilities %	Nevada %	Nevada		National	
							Non-Better %	Better %	Non-Better %	Better %
Favorable to legalization										
Nothing,	20	40	21	10	5	8	20	4	45	4
One game	7	<u>10</u>	9	4	4	3	5	2	<u>11</u>	5
Two games	8	8	⁵⁰ 7	11	7	1	2	1	11	⁵⁶ 7
Three games	7	4	8	6	7	3	2	4	5	8
Four games	<u>8</u>	4	<u>7</u>	10	10	4	3	4	6	9
Five games	7	⁵⁰ 7	5	⁵² <u>10</u>	7	4	10	2	4	8
Six games	8	5	7	10	⁵¹ <u>10</u>	6	<u>7</u>	6	3	<u>11</u>
Seven games	6	5	4	9	8	⁵⁰ 6	7	⁴⁹ 6	2	9
Eight games	5	3	7	4	8	6	8	5	1	8
Nine games	6	3	7	5	7	<u>13</u>	5	<u>15</u>	3	8
Ten games	5	3	5	5	5	10	0	13	2	6
Eleven games	5	1	6	4	11	13	5	15	2	6
Twelve games	4	2	3	4	5	10	12	10	2	5
Thirteen games	<u>4</u>	<u>5</u>	<u>4</u>	<u>8</u>	<u>6</u>	<u>13</u>	<u>14</u>	<u>13</u>	<u>3</u>	<u>6</u>
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

*Based on the questions: "...Which of these are legal in your state now?" "Any others" and if legal, "Would you like to see ___ continued or would you like to see it abolished?" and if not legal "...How do you feel about making ___ legal? Are you definitely in favor of legalizing it, do you tend to be in favor of legalizing it, do you tend to be against legalizing it, or are you definitely against legalizing it?"

The relative frequency of participation in individual games in Nevada differs a great deal from the nation as a whole. (Table 11.9-2) Slot machine players play an average of 49 times in a year; playing cards and dice with friends are engaged in an average 43 and 42 times a year, respectively. Casino bettors went an average of 28 times. The participation frequencies for all these gambling forms are much lower in the national sample. Frequency of playing the slot machines was not determined in the national sample, but it is probably similar to frequency of going to casinos once every seven days. In contrast, in the national sample, the highest gambling participation frequency is numbers (71 days) and no one in our Nevada sample reported playing numbers. Other games with high national participation frequencies and low Nevada figures include playing cards at a parlor, betting off-track on horses (OTB in New York compared to horse parlors in Nevada), betting on horses with a bookie, and mahjong. These differential frequencies of participation reflect to some extent the availability of games; nationally, numbers literally comes to the numbers player, a horse bookie is only a telephone call away, and in New York OTB is right around the corner. In Nevada, slot machines are ubiquitous, and casinos are not very far away.

In looking at the recreational aspect of gambling games in Nevada, it is clear that slot machines rank with church activities and active sports in terms of participation frequency (nearly 50 days). Cards and dice with friends (42 days) are slightly above fishing, hunting, and camping in frequency (38 days), casino games and keno (28 and 24 days) are slightly behind nightclubs, bars, and parties (34 days) and attending

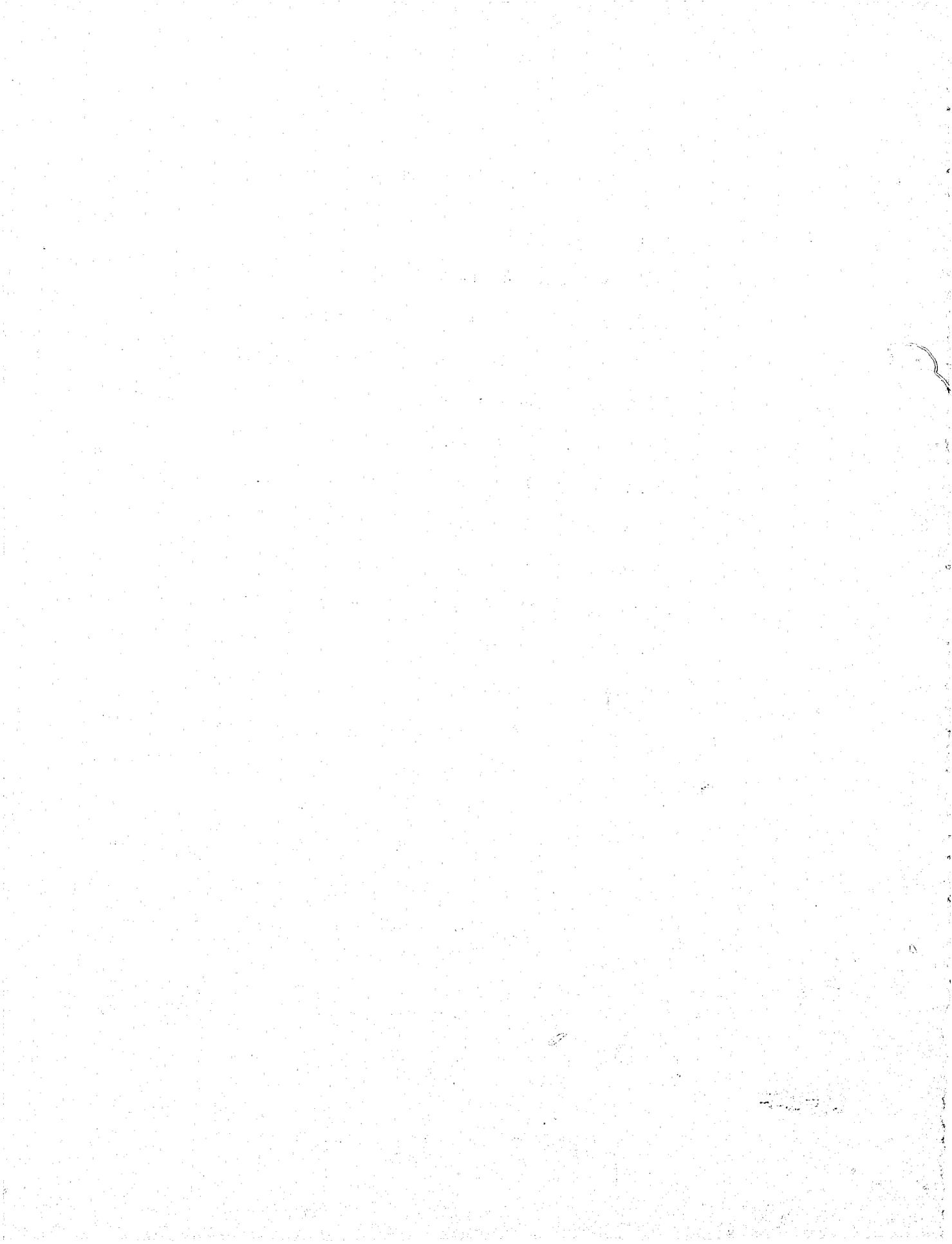


Table 11.10-2

Attitudes Toward Legalization

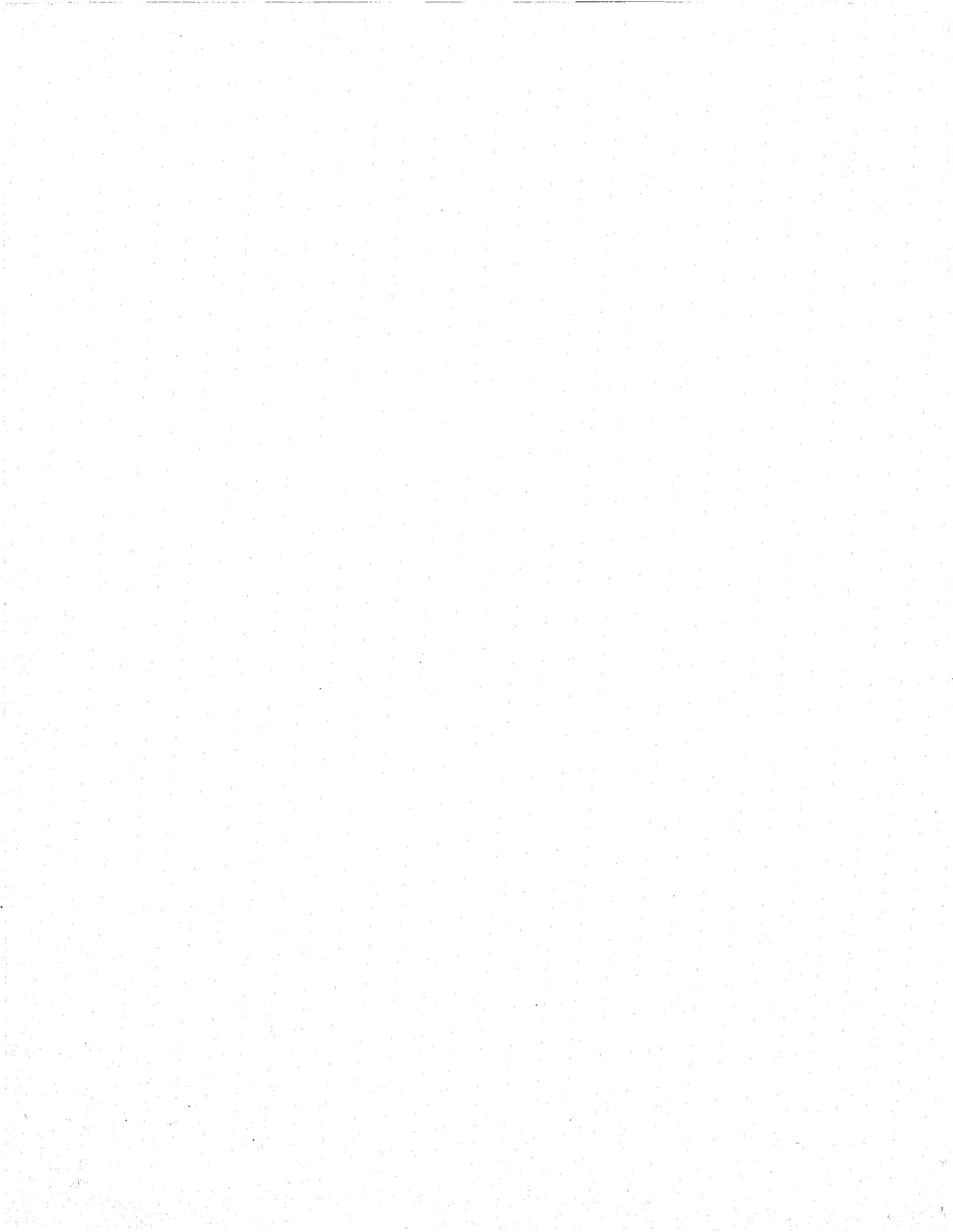
	<u>Positive</u>		<u>Negative</u>		<u>Unsure</u>		<u>No Answer</u>	
	Nevada %	National %	Nevada %	National %	Nevada %	National %	Nevada %	National %
Bingo	84	68	4	21	11	8	1	3
Horse tracks	75	62	11	26	10	10	4	2
State lottery	65	61	20	29	8	6	7	4
Dog tracks	64	49	19	42	7	5	10	4
Slot machines	84	40	5	53	10	3	1	4
Casinos	85	40	5	52	10	4	*	4
Off-track betting parlors	69	38	14	51	13	5	4	6
Sports cards or sheets	63	32	13	54	16	8	8	6
Pro sports betting	68	31	18	62	10	4	4	3
Numbers, bolitas, policy	34	22	37	60	21	12	8	6
College sports betting	45	22	40	72	8	3	7	3
Sports parlors	66	20	14	71	13	3	7	6
High school sports betting	17	16	47	77	*	3	36	4

*Less than one half of one percent.

Note: See Table 11.10-1 for questions asked.

Positive equals continue plus definitely plus tend to be in favor of legalizing it.

Negative equals abolish, plus definitely against plus tend to be against legalizing it.



CONTINUED

5 OF 7

sports events (29 days), and about as frequent as community activities, movies, and theatre (22 days).

In general, in Nevada the average frequency of participation in the most popular gambling games ranks about in the middle of the relative scale of leisure time activities. In the national sample, in contrast, the highest frequency of participation rates for gambling games (around 30) are near the bottom of the leisure time averages, except for numbers.

In terms of frequency of participation, unlike the rest of the United States, gambling seems to fit into the pattern of leisure time activity for bettors in Nevada. Whether gambling is complementary to these other activities, or a substitute for them, is another question that can be answered only under much more intensive analysis.

For most national bettors, on the other hand, gambling is an activity which is much less frequently engaged in than other leisure time pursuits.

11.10 Legalization

Another aspect of gambling is how favorable people are toward legalization of different games. In Nevada nearly everything is legal. Table 11.10-1 indicates that there is a strong correlation between the number of legal gambling facilities in a state and the number of games people want legalized. Nevada serves as the extreme point on the scale; as the "pseudo-median" marks indicate, nearly half of Nevadans favor the legalization of ten or more gambling activities (out of thirteen). Nevada non-bettors are about as favorable as national bettors toward legalization. About half of each group favored the legalization of seven or more games while over half of national non-bettors wanted none or one game legalized.

Let us now turn to attitudes toward legalization of individual games. Nearly 85 percent of Nevadans were favorable toward legal bingo, slot machines, and casinos. (Table 11.10-2) These three types of gambling also have the highest participation rates of the subset of games with information on legalization. Legal numbers and college and high school sports betting were favored by less than half of Nevadans. They were also ranked lowest by the national sample. Nevadans were more favorable toward the legalization of every game than the national sample, sometimes by a factor of two or more.

These comparisons indicate that the mere exposure to many legally available games, as in Nevada, leads to more favorable attitudes on the part of bettors and even non-bettors. In one sense, familiarity breeds acceptance. Of course, it is important to keep in mind that in Nevada the gambling industry provides a large proportion of the state's jobs, plus a lot of its revenue in the form of taxes on gambling activities. In the absence of this gambling revenue, the state's citizens would have to make it up in the form of higher sales and property taxes, or by instituting an income or estate tax (none exists now). Therefore even the non-gambling Nevada resident benefits from the gambling industry in terms of his job (either directly or indirectly) and low taxes. On simple grounds of economic self interest he might therefore be expected to be more favorable toward legalized gambling.

We asked bettors about some specific positive and negative consequences of legalized casino and sports betting (parlors) in Nevada; non-bettors were queried about gambling in general.

Table 11.10-3

Differential Attitudes Towards Effects of Legalization

	Random Subsets of Bettors				Non Bettors	
	Casinos		Betting Parlors		Gambling in General	
	Nev. %	Nat. %	Nev. %	Nat. %	Nev. %	Nat. %
<u>Positive consequences</u>						
More jobs for people	88	69	71	63	97	41
A lot more money to run the government	87	66	64	67	75	38
Less money for organized crime	46	45	44	27	32	33
More of a chance for the common man to get rich	22	18	14	48	23	14
<u>Negative consequences</u>						
More people working less because they are gambling	21	43	19	67	31	57
More of a chance that children will be influenced to gamble	42	66	40	53	42	82
More racketeers connected to it	41	61	48	22	53	71
More people gambling more than they can afford	78	76	74	59	77	81

A large majority of Nevada bettors say that legal casino gambling leads to more jobs for people and more money to run the government. (Table 11.10-3) On the other hand, nearly as many thought that it also is responsible for an increase in the number of people who gambled more than they could afford. Opinions about its effects on financing organized crime were equally divided pro and con. Only one fifth of Nevada bettors thought that casinos either induced people to work less, or provided a chance for ordinary people to get rich.

Compared to the national sample bettors, Nevada bettors are generally more optimistic about the beneficial effects of casinos. Comparing the opinions of gambling in general of Nevada non-bettors with those (on casinos) of Nevada bettors, we find that the non-bettor group is virtually unanimous in believing that legal gambling provides more jobs for people. They are somewhat less positive than the Nevada bettor group with respect to other effects of gambling (but generally more positive and less negative than the national bettors group). When we look at national non-bettors compared to Nevada non-bettors, it is clear that the national non-bettor group's expectations of bad consequences of legal gambling far outweigh the good ones. Remember that in Nevada we are dealing with the actual experience of legalized gambling and its perceived effects while in the nation as a whole, we are dealing with expectations regarding the outcome of a hypothetical event, mixed with some limited perceptions.

With respect to the effects of legal off-track betting (betting parlors in Nevada), Nevada bettors' opinions are somewhat less positive than those regarding legal casinos. National bettors, as expected, have fewer positive

Table 11.10-4

Perceptions of Law Enforcement Consequences
of Legalized Gambling

	Random Subsets of Bettors*				Non Bettors Gambling in General	
	Casinos		Parlors		Nev. %	Nat. %
	Nev. %	Nat. %	Nev. %	Nat. %		
Respect for Law						
More	36	17	35	15	23	13
Less	7	20	10	15	15	38
No change	57	62	55	70	62	36
Police corruption						
More	13	26	14	26	30	42
Less	25	16	32	23	10	15
No change	62	53	54	50	60	27
Political Corruption						
More	32	32	28	37	47	40
Less	17	10	18	10	6	11
No change	51	51	54	47	47	28

*Note: Where responses do not add to 100 percent the remainder provided no answer.

and more negative opinions than Nevada bettors.

In sum, it appears that the prime beneficial effects of legalized casino gambling perceived by Nevada bettors and non-bettors alike are more jobs and more government revenue; but most of them also admit that they see an increase in people gambling too much. Perceived effects on organized crime are not clear cut. Nevadans see little opportunity for the common man to get rich and few report that people are working less because they are gambling.

In addition to expected (or perceived) social consequences of legalizing gambling, we asked about the effects on law enforcement. (Table 11.10-4) With regard to legal casinos, 36 percent of Nevada bettors thought there was more respect for law, compared to seven percent who thought there was less. The perceived effect on police and political corruption was interesting; 13 percent saw more police corruption, but 32 percent reported more political corruption.

Nevada non-bettors were somewhat more negative with respect to the law enforcement consequences of legal gambling; 15 percent of them perceived less respect for the law, 30 percent thought there was more police corruption, and fully 47 percent saw more political corruption.

In general, although a majority of Nevadans saw no change in respect for the law, police corruption, and political corruption as a result of legalized gambling of different types, when changes were perceived, they were in the direction of more respect for the law, less police corruption, but more political corruption. There were differences of opinion between bettors and

Table 11.10-5

Operation and Regulation of Games

	Bettors				Non	
	Horse		Sports		Bettors	
	Betting		Betting		Gambling	
	Parlors		Parlors		in General	
	Nev.	Nat.	Nev.	Nat.	Nev.	Nat.
	%	%	%	%	%	%
Should be operated by						
Government employees	6	30	9	42	17	24
Private businessmen	86	55	81	47	70	33
Non-responsive answers	8	15	10	11	13	43
Should be regulated by						
Federal government	16	18	22	21	13	21
State government	57	42	52	59	60	27
Local government	17	37	13	16	10	15
Don't care	*	3	2	*	3	*
Non-responsive answers	10	*	11	4	14	37

*Less than one half of one percent

non-bettors on the changes in police corruption due to legal gambling. Nevada non-bettors saw more negative than positive law enforcement consequences. Comparing national opinion with Nevada opinions we see general agreement on the effect of legal gambling on political corruption, but Nevadans perceive better consequences for law enforcement than the rest of the nation expects.

Opinions of Nevadans with regard to who should operate gambling games are nearly unanimous and reflect the present reality in the state. Both bettors and non-bettors think gambling should be operated by private businessmen. (Table 11.10-5) A majority also believes that the state government should continue to regulate gambling. Note that substantial minorities of all Nevada groups favor federal or local control of gambling, indicating some dissatisfaction with current arrangements.

Nationally, a plurality of people also opt for private business operation of gambling, although a large number would choose government operation. Similarly, state government is the preferred gambling regulator of national bettors and non-bettors, although again, many would choose federal or local control.

11.11 Casinos, Slot Machines, and Keno

As noted before, Nevada has a unique gambling environment. We have made extensive comparisons of Nevada and national bettors with respect to gambling practices, attitudes, and exposure, plus perceptions of the social consequences of legalization. We shall now look at some details of Nevada casino, slot machine, and keno gambling, many of which were not asked of the national sample. Where there are comparable data, we will present them.

Table 11.11-1

Nevada and National Gambling at Casinos,
 Betting on Slot Machines, and Playing Keno

	Total Sample		1974 Bettor		1974 Non-Bettor	
	Nevada %	National %	Nevada %	National %	Nevada %	National %
Ever gambled at casino:						
Yes	40	27	46	41	19	4
No	60	73	54	59	81	96
Gambled at casino 1974:						
Yes	27	10	36	15	--	--
No	73	90	64	85	--	--
Ever played slot machines:						
Yes	82	--	99	--	24	--
No	18	--	1	--	76	--
Played slot machines 1974:						
Yes	72	8	93	14	--	--
No	28	92	7	86	--	--
Ever played keno:						
Yes	71	--	86	--	20	--
No	29	--	14	--	80	--
Played keno 1974:						
Yes	55	--	70	--	--	--
No	45	--	30	--	--	--

While 27 percent of the rest of the United States population have at some time in their life gambled at a casino, 40 percent of Nevada residents have done so. (Table 11.11-1) And in 1974, 10 percent of the United States sample, and 27 percent of the Nevada sample went to a casino. Having screened out those who move specifically to be near gambling facilities we have, in effect, lowered the proportion of those who go to gambling casinos. It is of interest to note that 31 percent of people in the rest of the West bet at a casino in 1974, while only five percent in the rest of the country did so. It would appear that easy availability of casinos raises the participation rate to about a third.

As can be seen from Table 11.11-2, only 15 percent of non-bettors in Nevada ever went to a casino for a show or to have dinner, while 36 percent of bettors did so; and 28 percent of the bettors went to a casino specifically to gamble.

Considering only those Nevada people who bet at a casino in 1974, the average number of times they went was 28. The favorite casinos to gamble at were housed in hotels with shows and big name stars for entertainment. A large minority preferred "other" casinos, presumably local ones not attached to hotels and resort facilities.

Nearly all casino gamblers played blackjack or 21, and it was the favorite game of fully three fourths of Nevada casino bettors. (Table 11.11-3) Less than ten percent played roulette, craps, or poker the most. Most Nevada casino players played only one type of game per session; very few played more than two. Most played an hour or less in a session. Fully a third of casino players said they usually went to more than one casino in

Table 11.11-2

Types of Casinos Attended

	Total Nevada Sample %	Nevada Bettor %	Nevada Non-Bettor %
Number of times went to a casino primarily for dinner or show in 1974:			
None, no answer	69	64	86
1-2	7	7	6
3-4	5	6	3
5-9	7	8	2
10-19	7	8	3
20-29	3	4	*
30 or more	2	3	*
			Casino Bettor %
Number of times went to a casino specifically to gamble:			
None, no answer	78	72	--
1-2	5	6	21
3-4	2	3	11
5-9	4	5	18
10-19	4	5	18
20-29	3	4	14
30 or more	4	5	18
Type casino played at most in 1974:			
Hotels with stars	10	14	41
Hotels with show	4	5	15
Other hotels	5	6	18
Other casinos	7	9	26
Didn't go to casino, no answer	74	66	--

a night of gambling. It was supposed that the pattern of hitting several casinos in a night on the town might be confined to tourists. Of course, it is possible that Nevada residents do this when they have out-of-town guests visiting and are showing them the "sights."

In Nevada slot machines have the highest incidence of participation. (Table 11.11-1) In the United States population, similar proportions gambled at casinos (10 percent) and played slot machines (eight percent) in 1974. But in Nevada, only 27 percent gambled at a casino, while 72 percent reported playing slot machines. Virtually all Nevada bettors played slot machines. Nevada people who played slot machines did so on average 49 days in 1974. (Table 11.11-1) Most played an hour or less at a time. Among all the places slot machines could be played, more people played them at a casino. Surprisingly the next most frequent place was stores; one half of the Nevada sample (70 percent of slot machine players) at some time in 1974 played slot machines in places such as grocery or department stores, laundromats, restaurants, or gas stations. Also surprisingly, these retail establishments were the second favorite place to play; 69 percent of slot players played slots most often in casinos, while 23 percent said their favorite place was stores. This implies that slot machines positioned at the exits of grocery stores and the like are very effective at gobbling up loose change as people are leaving. It may even be the only time these people play slot machines. The amounts they bet each time must necessarily be small due to the nature of change (by definition less than a dollar) unless there are change girls available. But the sheer number of situations where one is exiting a store with change and is

Table 11.11-3

Types of Casino Games Played

	Total Nevada Sample %	1974 Nevada Bettors %	1974	
			Casino Nevada %	Bettors National %
Games played at casino in 1974:				
Blackjack	24	31	91	47
Roulette	7	10	29	37
Craps	11	14	41	29
Poker/cards	6	7	21	n.a.
Something else	3	4	12	n.a.
Game played most at casino in 1974:				
Blackjack	20	26	73	
Roulette	2	2	6	
Craps	2	3	9	
Poker/cards	2	3	9	
Something else	1	1	3	
Didn't play, no answer	73	65	--	

Table 11.11-4

Frequency of Slot Machine Play and Type of Establishment

	Total Nevada Sample %	1974 Nevada Bettors %	Slot Machine Players %
Zero	28	7	--
1-5 days	18	24	26
6-20 days	21	27	29
21-50 days	16	20	21
51-100	8	11	12
100 or more	9	11	12
Place played slot machines in 1974:			
Casinos	67	87	94
Slot machine parlors	16	20	22
Bars	32	41	44
Stores	50	65	70
Rail, air, bus stations	22	28	30
Place played slot machines most often:			
Casinos	49	63	69
Slot machine parlors	*	*	*
Bars	5	7	7
Stores	16	21	23
Rail, air, bus stations	1	1	1
Didn't play, no answer	29	8	--

*Less than one half of one percent.

confronted with slot machines (much more enticing than the gum and candy machines similarly placed in other states) on the way out means that the total amount wagered in this incidental way is probably not insignificant.

Nickel slot machines are the overwhelming favorite of slot players, (Table 11.11-5) but most of them also played dime and quarter machines at least some of the time. Eighty-three percent said they sometimes put in multiple coins (usually five) because of "better odds" or a "bigger pot." For instance, the top jackpot on a nickel machine might commonly be ten dollars; if you put in two, it would be 20 dollars, and so on. But for the fifth nickel, the top jackpot might escalate to 100 dollars, instead of following the linear progression to 50 dollars. So in effect you are increasing the size of the expected payoff. Most slot players were apparently aware of this and at some time did play machines with multiple coins.

Keno appears to be second in popularity, behind slot machines. (Table 11.11-1) Seventy-one percent of Nevada residents have played it at some time; 55 percent did so in 1974. There appear to be two patterns of playing keno; it may serve as the main purpose of a gambling session or it can be played merely "to pass the time". "Pass the time" refers to providing a little variety to the main purpose of a gambling session, or to playing keno in a casino restaurant or bar while eating or drinking. Lighted keno boards on the walls present the results of the current game, and sometimes even "keno runners" are available to take slips to the windows for subsequent games.

Only 11 percent of Nevadans reported going to play keno as a main purpose in 1974. (Table 11.11-6) But fully 43 percent of the population played

Table 11.11-5

Details of Slot Machine Play

	Total Nevada Sample %	1974 Nevada Bettors %	Slot Machine Players %
Type of slot machines played in 1974:			
Penny	18	24	26
Nickel	67	89	96
Dime	54	70	75
Quarter	51	66	71
Other (50¢,\$1)	10	13	14
Type slot machines played most often in 1974:			
Penny	1	1	1
Nickel	58	75	81
Dime	5	7	8
Quarter	7	9	10
Didn't play, no answer	29	8	--
Ever put in multiple coins?			
Yes	60	77	83
Reasons for multiple coins:			
Bigger pot	22	28	31
Better odds	25	33	35
Just to try it	5	7	7
Some machines are set up that way	3	3	4
Other	5	6	7
Didn't bet multiple coins	40	23	17

Table 11.11-6

Frequency of Keno Playing

	Total Nevada Sample %	1974 Nevada Bettors %	Keno Bettors %
Days played keno 1974:			
None	45	30	--
1-2	9	11	17
3-5	12	15	21
5-9	5	7	10
10-19	14	18	25
20-49	7	9	13
50 or more	8	10	14
Number days played keno "to pass the time?":			
Zero, no answer	56	42	--
1-2	9	12	20
3-5	11	15	26
6-10	10	13	22
11-24	8	11	19
25 or more	6	7	13
Number of days played keno as main purpose:			
Zero, no answer	89	86	--
1-10	5	6	43
11 or more	6	8	57
Number of different keno games usually bet on:			
Zero	45	30	--
1	22	29	41
2	7	9	13
3	11	14	20
4	5	7	9
5-9	4	4	6
10 or more	6	7	11
Ever win at keno in 1974?			
Yes	18	24	34
No	35	46	66
Didn't play, no answer	47	30	--

keno "to pass the time," secondarily to playing other casino games at a restaurant or lounge. Further evidence of the essentially incidental nature of keno is the number of different games played in a session: over half the keno bettors played only one or two games a session, while a "hard core" ten percent played ten or more. For people who played keno, the average total number of days played was 24. Thirty-four percent of keno players said they won something during the year.

Let us now look at dollar amounts wagered on slot machines and casinos, and on other games. Seventy-two percent of Nevada residents bet on slot machines, an average of 377 dollars each in 1974. (Table 11.11-7) Twenty-seven percent of Nevada residents played casino games wagering on average 846 dollars each over the year. On a per adult capita basis, this becomes about 272 dollars for slot machines and 231 dollars for casinos. Per capita wagers on all other forms of gambling are trivial in comparison; bingo and betting parlors account for 25 dollars and 23 dollars per capita, respectively. Remember that due to our screening out of purposeful gambling movers, these percentages and averages are understandably low. They represent the amounts bet by "normal" people who grew up in Nevada or moved there for primary reasons other than the availability of gambling. On a per capita basis, these "normal" Nevada people spent over 500 dollars a year on gambling compared to their counterparts in the rest of the United States, who spent 155 dollars each. There is a huge increase in per capita wagering among people who have access to widespread legal gambling facilities. In terms of income, Nevada bettors venture an average of 3.3 percent of family income compared to about one percent for the rest of the United States. To

Table 11.11-7

Reported Gambling Behavior of Nevada Residents

Game	Participation (% of adult Population) %	Average Yearly Wager Per Bettor \$	Per Capita Yearly Bet \$
<u>Legal</u>			
Horses at track	3.2	103	3.30
Off-track betting parlors	6.0	179	10.20
Slot machines	72.1	377	271.82
Keno	54.2	n.a.	n.a.
Casinos	27.3	846	230.96
Sports betting parlors	8.0	158	12.64
Sports cards	3.0	36	1.04
Lottery	1.4	*	*
Bingo	24.1	104	25.06
Total legal	76.0	665	505.40
<u>Illegal</u>			
Sports books	2.9	275	7.98
Horse books	1.9	131	2.49
Numbers	0.0	*	*
Total illegal	4.3	257	7.45

Note: Remember that the function of the screening questions was to eliminate from the sample people who purposely moved to Nevada for gambling. Therefore the frequencies and means presented are undoubtedly lower than the truth. In addition, all estimates are subject to sampling variation. See Appendix B, Table B-4 for standard errors.

*Too few cases.

put it another way, if the gambling behavior of all Americans were similar to the average Nevadan's, the total volume of United States betting would be 73 billion dollars (instead of 22 billion dollars) and illegal betting would only be 1.9 billion dollars (compared to 5 billion dollars). A large amount of the increased handle would come from low income people, and the regressivity of gambling would increase.¹

When asked about the net results of their slot machine and casino playing in 1974, 15 percent of slot players said they won on balance, while 24 percent of casino players claimed to have made money over the year. (Table 11.11-8) Fifty six percent of slot players and 47 percent of casino players said they lost money for the year. The same number of each, 29 percent, reported they broke even. If these comparative results are correct, it is clearly better to bet on casino games than slot machines. Of course, there must be a good deal of self selection here; those people who play blackjack probably play it well, and since most people concede more skill is required to be successful at blackjack than to win on slot machines, skillful players can raise their net probabilities of winning by betting more when the odds are favorable. In contrast, slot machines players have no chance to increase their bets when the odds change, since the latter never occurs.

Distributions of amounts won and lost are also interesting. Nearly half of casino table winners won 150 dollars or more, while only 35 percent of slot machine winners won that much, and half of them won 75 dollars or less.

1. See Chapter 3.2 for a detailed discussion of regressivity of Nevada gambling.

Table 11.11-8

Reported Casino and Slot Machine Wins and Losses
in Nevada in 1974

	Casino Tables	Slot Machines
	%	%
<u>Net results:</u>		
Won	24	15
Lost	47	56
Broke even	29	29
<u>Amounts won:</u>		
Under \$25	19	29
\$25-75	12	19
\$75-150	20	17
\$150-300	14	9
\$300 or more	35	26
<u>Amounts lost:</u>		
Under \$25	25	56
\$25-75	15	19
\$75-150	20	13
\$150-300	17	3
\$300 or more	23	9

As for losers, 40 percent of casino table losers lost under 75 dollars, while another 40 percent of them lost 150 dollars or more. Slot machine losers lost a lot less; over half lost less than 25 dollars over the year, and only 12 percent lost as much as 150 dollars.

CHAPTER TWELVE

COMPULSIVE GAMBLERS

An issue aside from the revenue potential of legal gambling is whether legalization would result in a greater incidence of compulsive gambling in the population. Custer (in press)¹ has suggested that availability of and exposure to gambling activities is a predisposing factor in the development of compulsive gambling. The compulsive gambling syndrome has been described by Custer as "a preoccupation and urge to gamble with frequent gambling activity The gambling preoccupation, urge, and activity characteristically are progressive and with significant increases during periods of stress. Problems which arise as a result of gambling lead to an intensification of the gambling behavior. As an adult there is invariably a failure to sustain lasting close relationships with family, acquaintances, or sexual partners; but usually an ability to sustain good job performance over several years except in the later stages." Deleterious effects on society include loss of funds by lending sources, loss of time from the job and associated costs, and the cost of imprisonment and providing support for families whose funds have been depleted.

It is difficult to estimate from published sources how many compulsive gamblers there are in the United States today. Estimates of its

1. Custer, R.L. Description of Compulsive Gambling. Manuscript prepared for the American Psychiatric Association Task Force on Nomenclature (in press).

prevalence in the United States range from two percent (Custer, in press) to about six percent (Anonymous, undated source)¹, which is the most widely quoted figure. One goal of the current investigation was to provide evidence bearing on the incidence of compulsive gambling in the population. To that end, the literature concerning compulsive gambling and betting behavior was reviewed in order to select questions which would provide the basis for developing a scale which could discriminate between those who are compulsive gamblers and those who are not.

12.1 Selection of Items for Scale Development

A review of the psychological and sociological literature on gambling revealed a number of intuitive notions concerning the personality-characteristic composition of the compulsive gambler (see Kusyszyn, 1973 for a complete bibliography through March, 1972)². Most of these notions were founded on case histories rather than empirical data. The formulations ranged from neo-Freudian (Bergler, 1957)³ to shotgun empiricism (Livingston, 1974)⁴. Most authors viewed the compulsive gambler as a believer in the ethos of Fate, which is interpreted by some as the placement of the locus of control beyond one's grasp. The literature was also nearly unanimous in positing the compulsive gambler's desire to lose (it makes little difference for current purposes whether this desire is conscious or

-
1. Anonymous. Gamblers Anonymous. (3rd Ed.) Los Angeles: G. A. Publishing, Inc., undated.
 2. Kusyszyn, I. Gambling, risk-taking, and personality: A bibliography. The International Journal of the Addictions, 1973, 8 173-190.
 3. Bergler, E. The Psychology of Gambling. New York: Hill and Wang, 1957.
 4. Livingston, J. Compulsive Gamblers. New York: Harper and Row, 1974.

unconscious). The desire to lose is attributed to factors ranging from an unresolved Oedipal complex to low self-esteem. Further, the compulsive gambler is generally regarded as a fringe member of society (e.g., Marx, 1952)¹. A further attribute one would expect to be common among compulsive gamblers is a high propensity to engage in monetary risk-taking. Volumes have been devoted to risk-taking behavior, with some attention paid to gambling behavior in natural settings (e.g., Cohen and Hansel, 1956²; Lee, 1971)³. Attempts at paper and pencil measurement of risk-taking behavior have yielded disappointing results (Slovic, 1962, 1964)^{4,5}. One recent investigation (Jackson, et al., 1972)⁶ has focused on the multi-dimensional aspects of risk-taking behavior and scales were developed which were intended to measure "monetary," "physical," "ethical," and "social" risk-taking behavior.

Two empirical studies which employed measures of the concepts described above in a search for personality correlates of gambling behavior were

-
1. Marx, H.L., Jr. Gambling in America. New York: H.W. Wilson Co., 1952.
 2. Cohen, J. and Hansel, M. Risk and Gambling. London: Longmans, Green and Co., 1956.
 3. Lee, W. Decision Theory and Human Behavior. New York: Wiley and Sons, 1971.
 4. Slovic, P. Convergent validation of risk-taking measures. Journal of Abnormal and Social Psychology, 1962, 65, 68-71.
 5. Slovic, P. Assessment of risk-taking behavior. Psychological Bulletin, 1964, 61, 220-233.
 6. Jackson, D.N., Hourany, L. and Vidmar, N. A four-dimensional interpretation of risk-taking. Journal of Personality, 1972, 40, 483-501.

conducted by Cameron and Meyers (1966)¹ and Livingston (1974)². Cameron and Meyers employed the Edwards Personal Preference Schedule (Edwards, 1954)³ in a study of 69 male undergraduates. Subsequent to the administration of the EPPS, the students took part in betting situations with real and imaginary gains (no losses). Available to the students were bets which involved a low payoff but high probability of winning (a conservative bet), and bets which involved a high payoff but a low probability of winning (a gambler's bet). Students who chose the gambler's bet, as compared to the students who chose the conservative bet, were higher on EPPS "exhibitionism," "aggression," and "dominance" scores, and lower on EPPS "autonomy" and "endurance" scores. These results seem to us to fit aspects of theoretical notions and observations based on case histories, as well as being in agreement with Livingston's (1974)⁴ results.

Livingston's study was based on interviews held with 75 members of Gamblers Anonymous in the New England area. Test results were available on 36 to 51 of the respondents on the various scales of the Gough Adjective Check List (Gough and Heilbrun, 1965)⁵. Compared to national norms, the Gamblers Anonymous respondents were high on "exhibitionism," "aggression," and "autonomy" and low on "endurance". These findings, with the exception of the contradictory finding in the case of the "autonomy" score,

-
1. Cameron, B. and Meyers, J.L. Some personality correlates of risk-taking. The Journal of General Psychology, 1966, 74, 51-60.
 2. op. cit.
 3. Edwards, A.L. Manual. Edwards Personal Preference Schedule. New York: Psychological Corporation, 1954.
 4. op. cit.
 5. Gough, H. and Heilbrun, A. The Adjective Check List Manual. Palo Alto: Consulting Psychologists Press, 1965.

match the earlier findings of Cameron and Meyers. No statement concerning the agreement of the two studies with respect to "dominance" can be made due to the fact that no "dominance" scale is provided in the ACL. Other findings which cannot be corroborated due to incomparable scales are Livingston's findings that GA members scored significantly higher than the national norm on "self-control" and lower than the national norm on "need for affiliation." A final finding reported by Livingston was that GA members, as compared to national norms, checked significantly more unfavorable items and significantly fewer favorable items. This is indirect support for the hypothesis that compulsive gamblers are generally lower in self-esteem.

On the basis of the literature review and search for conceptual measures which met at least minimal standards of reliability and validity, 119 initial items were selected for inclusion in a preliminary "Compulsive Gambling Scale," which was later reduced to a smaller subset of items serving as the best predictors. The 119 items were selected from the following scales:

1. The Self-Acceptance Scale (Phillips, 1951)¹.
2. The Expressed Acceptance of Self Scale (Berger, 1952)².
3. Rotter's Internal-External Locus of Control Scale (Rotter, 1966)³.

-
1. Phillips, E. Attitudes toward self and others: A brief questionnaire report. Journal of Consulting Psychology, 1951, 15, 79-81.
 2. Berger, E. The relations between expressed acceptance of self and expressed acceptance of others. Journal of Abnormal and Social Psychology, 1952, 47, 778-782.
 3. Rotter, J.B. Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 1966, 80, (1 Whole No. 609).

4. James' Internal-External Locus of Control Scale (James, 1957)¹.
5. Anomy (McClosky and Schaar, 1965)².
6. Selected scales from the Adjective Checklist (Gough and Heilbrun, 1965)³: self-control, endurance, exhibitionism, need for autonomy, aggression, and need for affiliation.
7. The MMPI L-Scale (Hathaway and McKinley, 1951)⁴.
8. The Monetary Risk Taking Scale (Jackson, et al., 1971)⁵.

12.2 Data Collection and Analysis Procedures

The questionnaires were completed by 274 previously identified gamblers and a geographically matched sample of 239 church members. A multiple discriminant analysis of the 119 items was run using as a data base a randomly selected portion of the sample, composed of 120 compulsive gamblers and 120 church members. It yielded 18 items which discriminated between the two known groups, correctly classifying 95 percent of the church members and 90 percent of the compulsive gamblers. When the multiple discriminant function which was developed on this data base was applied to the remaining 154 compulsive gamblers and 119 church members in

-
1. James, W.H. Internal versus external control of reinforcement as a basic variable in learning theory. Unpublished doctoral dissertation, Ohio State University, 1957.
 2. McClosky, H. and Schaar, J.H. Psychological dimensions of Anomy. American Sociological Review, 1965, 30, 14-40.
 3. op. cit.
 4. Hathaway, S.R. and McKinley, J.C. Manual. Minnesota Multiphasic Personality Inventory. New York: The Psychological Corporation, 1951.
 5. Jackson, D.N., Hourany, L. and Vicmar, N. A four-dimensional interpretation of risk-taking. Research Bulletin No. 185, University of Western Ontario, June, 1971.

cross validation, the correct classification rate was again 95 percent for the church members and 90 percent for the compulsive gamblers. The distributions of scores of the compulsive gamblers and the church members on the 18 items are presented in Table 12.2-1.

In addition, questions concerning frequency of gambling which were asked of the church members were tabulated. For the purpose of developing a compulsive gambling predictor scale, it was fortunate that there was a good deal of variation in the frequency of gambling behavior of church members. All games mentioned in the questionnaire had been played by some of the church members in 1974. Eleven percent placed more than one bet during that year and the frequencies ranged to 98 times or more. (Table 2.2-2) If the church members had been abstainers in their gambling behavior, this test of our predictor items would have been in a situation quite unlike that which exists in the general population where there is a wide range of gambling behavior. The variation in gambling behavior among church members gave us more confidence in the estimates of potential problem-gamblers developed in the analysis based on the national sample.

Subsequent to the analysis of the data based on the compulsive gambler and church group data, the discriminant function weights which were established were applied to the scores of the respondents in the national sample on the 18 predictor variables and the probability of each respondent's membership in the compulsive gambler classification was computed. This probability estimate served as an initial basis for the development of our estimation of the incidence of compulsive gambling in the United States. A note of caution concerning the interpretation of this basis of estimation

Table 12.2-1
Distribution of Item Scores
for Compulsive Gamblers and Church Members

Item	Compulsive Gamblers (N=274) %	Church Members (N=239) %
<u>Anxious</u>		
1. Describes me very well	50.4	22.0
2. Describes me somewhat	32.1	39.0
3. Doesn't describe me very well	9.5	24.6
4. Doesn't describe me at all	8.0	14.4
	<u>100.0</u>	<u>100.0</u>
	Chi-square = 51.23	
	Gamma = .46	
<u>Careless</u>		
1. Describes me very well	20.1	1.7
2. Describes me somewhat	31.1	8.5
3. Doesn't describe me very well	25.7	37.4
4. Doesn't describe me at all	23.1	52.4
	<u>100.0</u>	<u>100.0</u>
	Chi-square = 103.47	
	Gamma = .62	
<u>Conventional</u>		
1. Describes me very well	19.6	40.0
2. Describes me somewhat	39.1	42.1
3. Doesn't describe me very well	23.4	14.9
4. Doesn't describe me at all	17.9	3.0
	<u>100.0</u>	<u>100.0</u>
	Chi-square = 48.41	
	Gamma = -.46	
<u>Good natured</u>		
1. Describes me very well	64.7	47.7
2. Describes me somewhat	28.3	49.8
3. Doesn't describe me very well	4.8	2.5
4. Doesn't describe me at all	2.2	0.0
	<u>100.0</u>	<u>100.0</u>
	Chi-square = 28.50	
	Gamma = .26	
<u>Irresponsible</u>		
1. Describes me very well	17.6	0.4
2. Describes me somewhat	22.1	1.7
3. Doesn't describe me very well	27.6	12.4
4. Doesn't describe me at all	32.7	85.5
	<u>100.0</u>	<u>100.0</u>
	Chi-square = 155.08	
	Gamma = .84	
<u>I guess I put on a show to impress people. I know I'm not the person I pretend to be.</u>		
1. Strongly agree	26.7	2.1
2. Agree	30.8	8.8
3. Disagree	25.3	46.4
4. Strongly disagree	17.2	42.7
	<u>100.0</u>	<u>100.0</u>
	Chi-square = 125.48	
	Gamma = .66	
<u>People were better off in the old days when everyone knew how he was supposed to act.</u>		
1. Strongly agree	12.1	4.6
2. Agree	20.5	18.1
3. Disagree	42.9	51.5
4. Strongly disagree	24.5	25.7
	<u>100.0</u>	<u>100.0</u>
	Chi-square = 10.61	
	Gamma = .14	
<u>When playing a game, I prefer to play for money.</u>		
1. True	82.4	11.0
2. False	17.6	89.0
	<u>100.0</u>	<u>100.0</u>
	Chi-square = 255.37	
	Gamma = -.95	
<u>The higher the stakes, the more I would enjoy the bet.</u>		
1. True	73.4	3.8
2. False	26.6	96.2
	<u>100.0</u>	<u>100.0</u>
	Chi-square = 251.99	
	Gamma = -.97	

Table 12.2-1 continued

Item	Compulsive Gamblers X	Church Members Y
<u>When gambling, I would "go for broke" rather than play it safe.</u>		
1. True	80.2	7.6
2. False	19.8	92.4
	100.0	100.0
	Chi-square = 266.99 Gamma = -.96	
<u>I would be willing to invest my money in a new uranium mining venture.</u>		
1. True	37.1	19.1
2. False	62.9	80.9
	100.0	100.0
	Chi-square = 19.26 Gamma = -.43	
<u>I generally feel it best to be cautious and conservative with my money.</u>		
1. True	23.7	83.1
2. False	76.3	16.9
	100.0	100.0
	Chi-square = 177.09 Gamma = .88	
<u>I would never put <u>all</u> of my money into a venture, even though the possible profits were great.</u>		
1. True	53.8	94.1
2. False	46.2	5.9
	100.0	100.0
	Chi-square = 101.66 Gamma = .86	
<u>Once in awhile I put off until tomorrow what I ought to do today.</u>		
1. True	95.2	98.3
2. False	4.8	1.7
	100.0	100.0
	Chi-square = 2.91 Gamma = .49	
<u>Sometimes at elections I vote for men about whom I know very little.</u>		
1. True	81.1	89.1
2. False	18.9	10.9
	100.0	100.0
	Chi-square = 5.64 Gamma = .31	
<u>I do not always tell the truth.</u>		
1. True	90.4	67.5
2. False	9.6	32.5
	100.0	100.0
	Chi-square = 39.85 Gamma = -.64	
(1-3) I am careful to avoid any behavior which might compromise my ethical standards.	33.9	65.4
(4-6)	31.8	25.2
(7-9) I am flexible about standards of behavior even if there is some risk.	34.3	9.4
	100.0	100.0
	Chi-square = 68.19 Gamma = .46	
(1-3) I am concerned about getting hurt.	47.6	33.1
(4-6)	33.3	48.3
(7-9) I enjoy an element of physical danger.	19.1	18.6
	100.0	100.0
	Chi-square = 31.49 Gamma = -.14	

Table 12.2-2

Extent of Gambling Reported by Church Members

	Days in 1974			Total %
	0 %	1-12 %	13 or more %	
Purchased lottery tickets	60	29	11	100
Played bingo	92	7	1	100
Bet on the numbers	97	2	1	100
Bet on sports with friends	70	25	5	100
Bet on office pools	67	30	3	100
Bet on sports cards	92	6	2	100
Bet on sports with bookies	98	2	0	100
Bet on horses at the track	80	17	3	100
Bet on horses with a bookie	97	2	1	100
Play slot machines	91	9	0	100
Play cards for money	66	30	4	100
Play dice for money	93	7	0	100
Go to a casino	92	8	0	100
Play pool/billiards for money	88	9	3	100
Make a special trip to gamble	93	6	1	100

should be inserted. The discriminant analysis on which it is based discriminates quite reliably between people who are compulsive gamblers and a quasi-control group of church members. It is entirely possible that people in the general population who resemble the compulsive gambler profile to a greater extent than the church member profile do so either because they actually are compulsive gamblers, have a propensity for becoming such, or possibly they exhibit some other abnormal personality characteristic which places them closer to the profile of the compulsive gambler. For this reason, the probability level of classification as a compulsive gambler was deliberately set quite high. A person's probability of being classified as a compulsive gambler was required to be .96 or greater before he was considered to be in the "at risk" group. The distribution of probabilities of membership in the compulsive gambling group are presented in Table 2.2-3. In addition, a number of other variables were examined in relation to the probability of classification as a compulsive gambler in order to minimize the number of false positive classifications. In spite of these precautions, however, the safest assumption was that the initial estimate of possible compulsive gamblers is an overestimate.

In view of this, the 328 interviews of the "at risk" group were clinically examined in detail and further classified as shown in Table 12.2-4. This classification was made on the basis of the comments recorded by the interviewers in the section provided at the end of the interview and by examination of the betting behavior reported by the respondent. The details of the clinical classification procedures are presented in Appendix B: Methodological Notes. On the basis of this classification,

Table 12.2-3

Distribution of Probability of Classification
as a Compulsive Gambler

(National Sample; Weighted Data)

Probability of Classification as Compulsive Gambler	Percent of Respondents (Weighted Data)	Unweighted N
.00-.05	34	558
.06-.10	12	188
.11-.20	14	213
.21-.50	11	196
.51-.80	7	131
.81-.95	5	108
.96-1.00	16	328
Missing data	<u>1</u>	<u>14</u>
	100%	1736

Table 12.2-4

Further Classification of the Quantitatively Determined
"At Risk" Group

	"At Risk" Group %
Probable compulsive gamblers	9
Potential compulsive gamblers	15
Other pathology	18
Poor comprehension, illiterate	14
Others	<u>44</u>
	100

0.73 percent of the total sample was classified as "probable compulsive gamblers" and 2.22 percent as "potential compulsive gamblers." In view of the fact that the initial probability level was set at .96 or greater for quantitative classification in the "at risk" category, these estimates should be incremented by approximately five percent to compensate for errors in prediction. Such an adjustment leads to an estimated 0.77 percent incidence of probable compulsive gamblers and 2.33 percent incidence of potential compulsive gamblers in the population.

Using the population projection factor used throughout this report, these data lead us to estimate that there are approximately 1.1 million compulsive gamblers in the United States. These estimates are considerably lower than the six to nine million estimated by Gamblers Anonymous.¹ However, the sources of the Gamblers Anonymous estimates are not known. Custer² has estimated that about two percent of the men and 0.2 percent of the women in the United States are compulsive gamblers. When the estimates from the current study are broken down by sex our projection to the United States adult population are 1.1 percent of the men and 0.5 percent of the women classified as compulsive gamblers and an additional 2.7 percent of the men and 2.0 percent of the women classified as potential compulsive gamblers.

1. op. cit.

2. op. cit.

12.3 Scores on Predictor Items and Compulsive Gambling Classification

The response distributions on the 18 compulsive gambler predictor items are shown in Table 12.3 for the total sample and those who were classified as potential and probable compulsive gamblers. The greatest differences between the responses of the total sample and the two compulsive gambler groups occur on the items concerning betting. A greater percentage of those classified as potential or probable compulsive gamblers say they prefer to play games for money, enjoy betting for high stakes, and would "go for broke" rather than play it safe. A smaller percentage say they feel it is best to be cautious and conservative with money.

Three of the items are from the lie scale of the Minnesota Multiphasic Personality Inventory. On one of those items, "Once in a while I put off until tomorrow what I ought to do today," a much higher percentage of the two compulsive gambling group answered in the "dishonest" direction (i.e., denying that they put things off once in a while). On the other two lie scale items the two compulsive gambling groups do not consistently answer in the "dishonest" direction to any greater extent than the general population. In fact, 72 percent of the probable compulsive gamblers, compared to 54.6 percent of the total sample, said they do not always tell the truth. This result is similar to the result in the special study of known compulsive gamblers, where 90 percent of the known compulsive gamblers admitted that they did not always tell the truth, compared to 67 percent of the controls.

Although lying is a major characteristic associated with compulsive gambling (Custer)¹, compulsive gamblers do not seem to be compulsive liars when responding to items such as these. It is quite possible that with assurances of confidentiality they feel free to admit that they are not always truthful.

12.4 Demographic Variables and Compulsive Gambling

Table 12.4 presents the breakdown by sex, income, age, race, and education for the total sample, those classified as probable compulsive gamblers, and those classified as potential compulsive gamblers. The percentage of women is smaller in both gambling classification groups than in the total sample, which should be expected. The ratio of women in the probable compulsive gambler group is higher than that observed in Gamblers Anonymous meetings, however, and the mix in the potential compulsive gambler group is almost half and half. This result suggests the possibility that the female compulsive gambler, like the female alcoholic, is less "visible" than her male counterpart. A combination of legal, socially acceptable forms of gambling combined with changing sex roles could result in an increased visibility of female compulsive gamblers, and a possibility of an increasing number of potential compulsive gamblers surfacing as actualized compulsive gamblers.

Both potential compulsive gamblers and probable compulsive gamblers are somewhat over-represented in the over \$15,000 income bracket compared to the general population, but those with incomes between \$5,000 and \$10,000 are over-represented in the potential compulsive gambler group. Perhaps

1. op. cit.

Table 12.3

Distribution of Item Scores for Potential and Probable Compulsive Gamblers*

Item	Total Sample X	Potential Compulsive Gamblers X	Probable Compulsive Gamblers X
<u>Anxious</u>			
1. Describes me very well	25.0	26.5	34.0
2. Describes me somewhat	45.2	33.2	56.2
3. Doesn't describe me very well	18.3	10.1	7.6
4. Doesn't describe me at all	10.4	30.2	2.2
No answer	1.1	0.0	0.0
	100.0	100.0	100.0
<u>Careless</u>			
1. Describes me very well	3.2	2.7	0.0
2. Describes me somewhat	20.3	12.9	25.7
3. Doesn't describe me very well	34.5	18.9	34.9
4. Doesn't describe me at all	41.2	65.5	39.4
No answer	0.8	0.0	0.0
	100.0	100.0	100.0
<u>Conventional</u>			
1. Describes me very well	21.0	33.5	38.7
2. Describes me somewhat	51.7	44.3	33.1
3. Doesn't describe me very well	15.4	15.5	22.7
4. Doesn't describe me at all	9.8	5.9	4.3
No answer	2.1	0.8	1.2
	100.0	100.0	100.0
<u>Good natured</u>			
1. Describes me very well	53.0	45.6	60.3
2. Describes me somewhat	41.4	43.4	32.5
3. Doesn't describe me very well	4.1	5.3	7.2
4. Doesn't describe me at all	0.6	5.7	0.0
No answer	0.9	0.0	0.0
	100.0	100.0	100.0
<u>Irresponsible</u>			
1. Describes me very well	2.8	0.8	0.0
2. Describes me somewhat	8.6	8.3	9.5
3. Doesn't describe me very well	25.3	23.1	15.5
4. Doesn't describe me at all	62.2	66.3	75.0
No answer	1.1	1.5	0.0
	100.0	100.0	100.0
<u>I guess I put on a show to impress people.</u>			
<u>I know I'm not the person I pretend to be.</u>			
1. Strongly agree	0.8	0.4	0.0
2. Agree	7.6	13.4	20.5
3. Disagree	52.2	37.9	57.0
4. Strongly disagree	38.7	48.3	22.5
No answer	0.7	0.0	0.0
	100.0	100.0	100.0
<u>People were better off in the old days when everyone knew how he was supposed to act.</u>			
1. Strongly agree	17.3	23.7	29.5
2. Agree	30.6	24.6	33.0
3. Disagree	41.1	42.0	35.6
4. Strongly disagree	9.7	9.7	1.9
No answer	1.3	0.0	0.0
	100.0	100.0	100.0
<u>When playing a game, I prefer to play for money.</u>			
1. True	16.5	51.4	62.6
2. False	82.3	48.6	37.4
No answer	1.2	0.0	0.0
	100.0	100.0	100.0
<u>The higher the stakes, the more I would enjoy the bet.</u>			
1. True	12.9	18.8	47.6
2. False	85.3	81.2	52.4
No answer	1.6	0.0	0.0
	100.0	100.0	100.0

Table continued next page

Table 12.3 continued

	Total Sample %	Potential Compulsive Gamblers %	Probable Compulsive Gamblers %
<u>When gambling, I would "go for broke" rather than play it safe.</u>			
1. True	7.6	20.2	31.4
2. False	90.5	79.8	68.6
No answer	1.9	0.0	0.0
	100.0	100.0	100.0
<u>I would be willing to invest my money in a new uranium mining venture.</u>			
1. True	7.8	13.4	8.0
2. False	90.6	86.6	92.0
No answer	1.6	0.0	0.0
	100.0	100.0	100.0
<u>I generally feel it best to be cautious and conservative with my money.</u>			
1. True	89.2	73.1	63.3
2. False	9.7	23.0	36.7
No answer	1.1	3.9	0.0
	100.0	100.0	100.0
<u>I would never put <u>all</u> of my money into a venture, even though the possible profits were great.</u>			
1. True	79.9	80.5	76.1
2. False	19.2	19.5	23.9
No answer	0.9	0.0	0.0
	100.0	100.0	100.0
<u>Once in awhile I put off until tomorrow what I ought to do today.</u>			
1. True	85.3	23.5	20.4
2. False	14.0	76.5	79.6
No answer	0.7	0.0	0.0
	100.0	100.0	100.0
<u>Sometimes at elections I vote for men about whom I know very little.</u>			
1. True	47.2	37.6	71.0
2. False	50.1	62.4	29.0
No answer	2.7	0.0	0.0
	100.0	100.0	100.0
<u>I do not always tell the truth.</u>			
1. True	54.6	54.5	72.0
2. False	44.0	45.5	28.0
No answer	1.4	0.0	0.0
	100.0	100.0	100.0
(1-3) I am careful to avoid any behavior which might compromise my ethical standards.	51.1	43.5	40.9
(4-6)	32.8	29.3	43.2
(7-9) I am flexible about standards of behavior even if there is some risk.	15.3	27.2	15.9
No answer	0.8	0.0	0.0
	100.0	100.0	100.0
(1-3) I am concerned about getting hurt.	49.4	43.6	29.7
(4-6)	39.3	40.2	51.3
(7-9) I enjoy an element of physical danger.	10.9	16.2	19.0
No answer	0.4	0.0	0.0
	100.0	100.0	100.0

*Note: The percentages of potential and probable compulsive gamblers are based on small samples and the results should be interpreted as order effects rather than in terms of absolute percentages.

it is the lack of funds itself or the lack of opportunities to get funds which is acting as a restraint to actualizing the compulsive gambling syndrome. Furthermore, the large proportion of potentials in the very highest income brackets may actually be compulsive gamblers but their large incomes allow for those excess expenditures to go on for much longer without being detected.

The majority of those classified as probable compulsive gamblers fall in the 45 to 64 year age range, while the majority of the potential compulsive gamblers are between 25 and 44 years of age. All but one percent of those classified as probable compulsive gamblers are between 25 and 64 years old. Compulsive gambling has been described as a progressive syndrome which develops over time. Perhaps the age differentials between potential and probable are reflecting the number of years it takes to become a full-fledged gambling addict.

Whites are under-represented in both the probable and potential compulsive gambler groups compared to the general population. Blacks are somewhat over-represented in the potential compulsive gambler group, while those who are from "other" racial stock are over-represented in the probable compulsive gambler category. The large proportion of blacks in the potential group but not in the probable group may reflect the recent upward income modifications among the black population.

Those with only high school education account for 42 percent of the potential compulsive gambler group, while almost half of the probable compulsive gamblers have attended college. The majority of both gambler groups are working, but retired people are over-represented among probable

Table 12.4

Demographic Characteristics by Compulsive
Gambling Classification*

	Total Sample %	Potential Compulsive Gamblers %	Probable Compulsive Gamblers %
<u>Sex</u>			
Male	46	53	64
Female	54	47	36
<u>Family income</u>			
Under \$5,000	13	8	3
\$5,000-\$10,000	18	29	4
\$10,000-\$15,000	22	13	37
\$15,000-\$20,000	18	22	30
\$20,000-30,000	14	12	9
\$30,000 or more	9	13	17
No answer	6	3	0
<u>Age</u>			
18-24 years	14	9	1
25-44 years	43	59	32
45-64 years	31	26	67
65 or over	12	5	1
No answer	0	1	0
<u>Race</u>			
White	85	77	74
Black	9	14	8
Other	4	9	18
Not ascertained	2	0	0
<u>Education</u>			
Less than high school	32	17	29
High school	31	42	14
Some college	21	28	49
College graduate	16	13	8
<u>Employment status</u>			
Working	53	74	64
Unemployed/laid off	4	7	1
Retired	10	1	17
Permanently disabled	1	1	2
Housewife	28	14	16
Student	3	3	0
No answer	1	0	0
<u>Distance from 25 largest cities</u>			
Less than 25 miles	33	69	79
25-49 miles	12	4	7
50 miles or more	55	27	14
<u>Geographic region</u>			
Northeast	23	43	17
North Central	28	15	8
South	31	8	16
West	18	34	59
<u>Religious preference</u>			
Protestant	66	55	67
Catholic	26	42	30
Jewish	2	2	2
Other	6	1	1
<u>Ethnic background</u>			
Irish	22	3	1
Italian	6	16	18
Jewish	2	0	9
West European	40	10	30
Spanish-speaking	4	3	18
Other	26	68	24

*Note: The percentages of potential and probable compulsive gamblers are based on small samples and the results should be interpreted as order effects rather than in terms of absolute percentages.

compulsive gamblers and those unemployed or temporarily laid off are over-represented among potential compulsive gamblers. Both potential and probable compulsive gamblers are concentrated nearer the larger cities and in the Western United States, although the potential compulsive gamblers also show a high concentration in the Northeast.

Custer¹ reports that compulsive gambling is more common among people with an Irish, Italian, or Jewish heritage and among those of Jewish and Catholic religions. The current data indicate that those of the Catholic religion and those of Italian and Spanish ethnic backgrounds are over-represented in the probable and potential compulsive gambler groups relative to their proportion in the general population, but those who express Judaism as a religious preference or are from Irish ethnic background are not over-represented in the gambler groups. It may be the concentration of these ethnic mixes which is responsible for the high potential rates in the Northeast and the proximity of Nevada which creates the high rates in the West. Multivariate analyses are called for to disentangle these factors and may be done in the future by other students of pathological gambling behavior.

12.5 Stability and Compulsive Gambling

Once a person has reached the advanced stages of compulsive gambling, relationships with others generally deteriorate and debts begin mounting. Consequently, the interview included questions concerning family problems, job stability, and outstanding debts. As shown in Table 12.5, 10 percent of those classified as probable compulsive gamblers have been married three or more times compared to two percent in the general population and four

1. op. cit.

Table 12.5

Stability and Compulsive Gambling*

-437-

	Total Sample %	Potential Compulsive Gamblers %	Probable Compulsive Gamblers %
<u>Number of marriages</u>			
None	12	12	3
One	72	72	76
Two	13	12	11
Three or more	2	4	10
No answer	1	0	0
<u>Years at current address</u>			
Less than 1	13	17	24
1-3	26	24	14
4-9	24	19	27
10 or more	36	38	35
No answer	1	2	0
<u>Total outstanding debt excluding home</u>			
None	61	66	67
\$1-\$1,000	9	13	7
\$1,000-\$2,000	7	4	0
\$2,000-\$4,000	10	9	15
\$4,000 or more	11	8	11
No answer	2	0	0
<u>Dollars spent on vacation in 1974</u>			
None	24	14	4
\$1-\$100	15	12	18
\$100-\$500	30	43	14
\$500-\$1,000	18	21	30
Over \$1,000	12	10	34
No answer	1	0	0
<u>Job is:</u>			
Very much like what I want	55	60	62
Somewhat like what I want	28	22	36
Not much like what I want	16	18	2
No answer	1	0	0
<u>Days of work missed in 1974</u>			
None	43	53	75
1-5	34	23	12
6-10	10	10	1
11-30	8	12	9
31+	2	2	3
No answer	3	0	0
<u>Days late to work in 1974</u>			
None	64	79	86
1-5	22	18	14
6-10	6	1	0
11-30	3	2	0
31+	2	0	0
No answer	3	0	0
<u>Wages garnished in last three years</u>			
Yes	1	0	1
No	85	80	69
Self employed	13	20	30
No answer	1	0	0
<u>Number of paychecks per month</u>			
1-2	49	58	35
3-4	34	14	15
5 or more	1	5	1
Self employed	13	20	39
No answer	3	3	11
<u>Disagree with spouse on finances</u>			
Never/rarely	56	73	36
Sometimes	33	18	48
Often/very often	10	9	16
No answer	1	0	0
<u>Children have:</u>			
More problems than most	4	25	21
About as many problems	51	39	20
Fewer problems	43	36	59
No answer	2	0	0

*Note: The percentages of potential and probable compulsive gamblers are based on small samples and the results should be interpreted as order effects rather than in terms of absolute percentages.

percent among potential compulsive gamblers. Almost a fourth of the probable compulsive gamblers and 17 percent of the potential compulsive gamblers have lived at their current address for less than one year, as compared to 13 percent in the general population. The total outstanding debt reported by those classified as probable and potential compulsive gamblers, however, is not drastically different from that among the general population. Twenty-six percent of the probable compulsive gambler group and 17 percent of the potential compulsive gambler group report a total debt of \$2,000 or more, compared to 21 percent in the general population.

The amount spent on vacation differs markedly between the two compulsive gambling groups and the general population. Thirty-four percent of the probable compulsive gambler group reported spending over \$1,000 on vacations compared to 12 percent in the total population. The potential compulsive gamblers resemble the total sample more than the compulsive group on this variable, although only 14 percent of the potential group spent nothing while 24 percent of the total sample spent nothing on vacation. Those classified as probable or potential compulsive gamblers also reported spending more money per week on recreation than the total sample. These results are congruent with the general "free-spending" life style characteristic of compulsive gamblers.

Those classified as probable compulsive gamblers report being more satisfied with their jobs than the general population. The potential compulsive gambler falls in between the two on reported job satisfaction. Further, a greater percentage of both those classified as potential and probable compulsive gamblers reported no days of work missed and fewer

days late to work than the general population. Although this result was unanticipated, it does match Custer's¹ description of the compulsive gambler as generally exhibiting a good job record which is not disrupted until the late stages of the compulsion.

Other job-related variables were the number of paychecks received in a month and whether the respondents' wages had ever been garnisheed. The compulsive gambler groups did not report wage garnishment any more frequently, but they were paid more frequently than the total population, because they had a higher percentage who were self-employed. The relative freedom in setting one's own schedule and ready access to cash for which one is not strictly accountable among the self-employed fits the pattern of predisposing factors in the development of compulsive gambling.

The hypotheses concerning the association of compulsive gambling with family disruption were supported. Compared with the general population, over four times the percentage of the two compulsive gambler groups report that their children had more problems than others and a greater percentage of the probable compulsive gambler group than the general population reported disagreeing with their spouse about finances.

12.6 Exposure to Gambling and Compulsive Gambling

In view of the hypothesized relationship between childhood or adolescent exposure to gambling and the development of gambling behavior, several questions regarding childhood and current exposure to gambling

1. op. cit.

Table 12.6

Early and Current Exposure
to Gambling and Compulsive Gambling*

	Total Sample %	Potential Compulsive Gamblers %	Probable Compulsive Gamblers %
<u>When young knew quite a lot of people who:</u>			
Bet on horses at the track	12	34	26
Bet on horses away from the track	6	19	14
Played bingo for money	25	24	29
Bought lottery tickets	11	40	13
Bet on the numbers	7	38	14
Played slot machines	14	23	16
Bet at casinos	6	22	25
Bet on sports cards	10	28	23
Bet on sports with bookies	6	37	23
Bet on sports with friends	21	39	23
Played cards with friends	30	41	66
Shot dice	12	34	21
Bet at dog tracks	4	14	17
<u>Now know quite a lot of people who:</u>			
Bet on horses at the track	26	64	67
Bet on horses away from the track	12	40	22
Play bingo for money	38	75	33
Buy lottery tickets	37	70	34
Bet on the numbers	9	57	19
Play slot machines	19	56	37
Bet at casinos	17	53	36
Bet on sports cards	15	46	28
Bet on sports with bookies	10	33	19
Bet on sports with friends	31	53	32
Play cards with friends	39	53	51
Shoot dice	13	24	36
Bet at dog tracks	9	22	2

*Note: The percentages of potential and probable compulsive gamblers are based on small samples and the results should be interpreted as order effects rather than in terms of absolute percentages.

were asked. Both those who were classified as probable compulsive gamblers and those classified as potential compulsive gamblers reported a great deal more childhood and current exposure to most gambling activities than the total sample. However, those classified as potential compulsive gamblers reported a greater degree of exposure to gambling as a child and now than do those classified as probable compulsive gamblers. (Table 12.6) As noted elsewhere in this report, there is a strong association between exposure to gambling by others and most forms of gambling behavior. The first bet has to be made before a pattern of compulsive gambling can develop, and it is not surprising that exposure to gambling is greater among those who tend toward compulsive gambling.

12.7 Needs and Need Fulfillment

In previous chapters it has been noted that bettors generally report a greater need for most things they were asked about except hard work. The discrepancy between what bettors say they need and what they think they have is generally greater than the general population with respect to "money," "luck," and "chances to get ahead." This pattern is somewhat different when the needs and need fulfillment of those classified as compulsive gamblers are examined (Table 12.7) Both probable and potential compulsive gamblers reported needing more money than the general population, but the discrepancy between what they need and what they have is essentially the same. Although the two compulsive groups show a higher need for savings, the discrepancy between the savings they say they now have and what they say they need is not as great as among the general

Table 12.7

Needs and Need Fulfillment
and Compulsive Gambling*

	Mean Need ^a			Need Fulfillment ^b		
	Total Sample	Potential Compulsive Gamblers	Probable Compulsive Gamblers	Total Sample	Potential Compulsive Gamblers	Probable Compulsive Gamblers
Control over own life	5.85	5.67	5.71	-40	-1	+53
Close, comfortable relationships	5.81	5.52	5.60	-3	+46	+112
Interesting things to do	5.76	6.08	6.06	-50	-55	-36
Well mannered associates	5.75	6.47	6.92	-23	-44	-58
Things to look forward to	5.73	4.93	5.80	-9	+72	+61
Success	5.41	5.75	4.98	-35	-30	+40
Money	5.19	5.40	5.76	-112	-108	-112
Chances to get ahead	5.09	5.32	5.18	-54	-27	-18
Savings	5.03	5.08	5.25	-147	-92	-85
Challenges	4.96	5.97	5.45	-19	-48	-33
Time for recreation	4.82	4.75	4.64	-33	-53	+44
Hard work	4.47	4.88	5.77	+107	+131	+54
Luck	3.99	3.98	4.87	-16	+31	+93
Excitement	3.71	3.68	3.60	+62	+98	+241
Power	3.17	3.43	3.04	+1	0	+106

*Note: Positive values indicate that people say they have more than they need; negative values indicate they need more than they have.

^aSee pages 55 and 56 of Appendix D: Questionnaire. Scale: 1(not at all___) to 8(very___).

^bDerived by subtracting "need" from "have" scores and multiplying by 10 for ease of presentation.

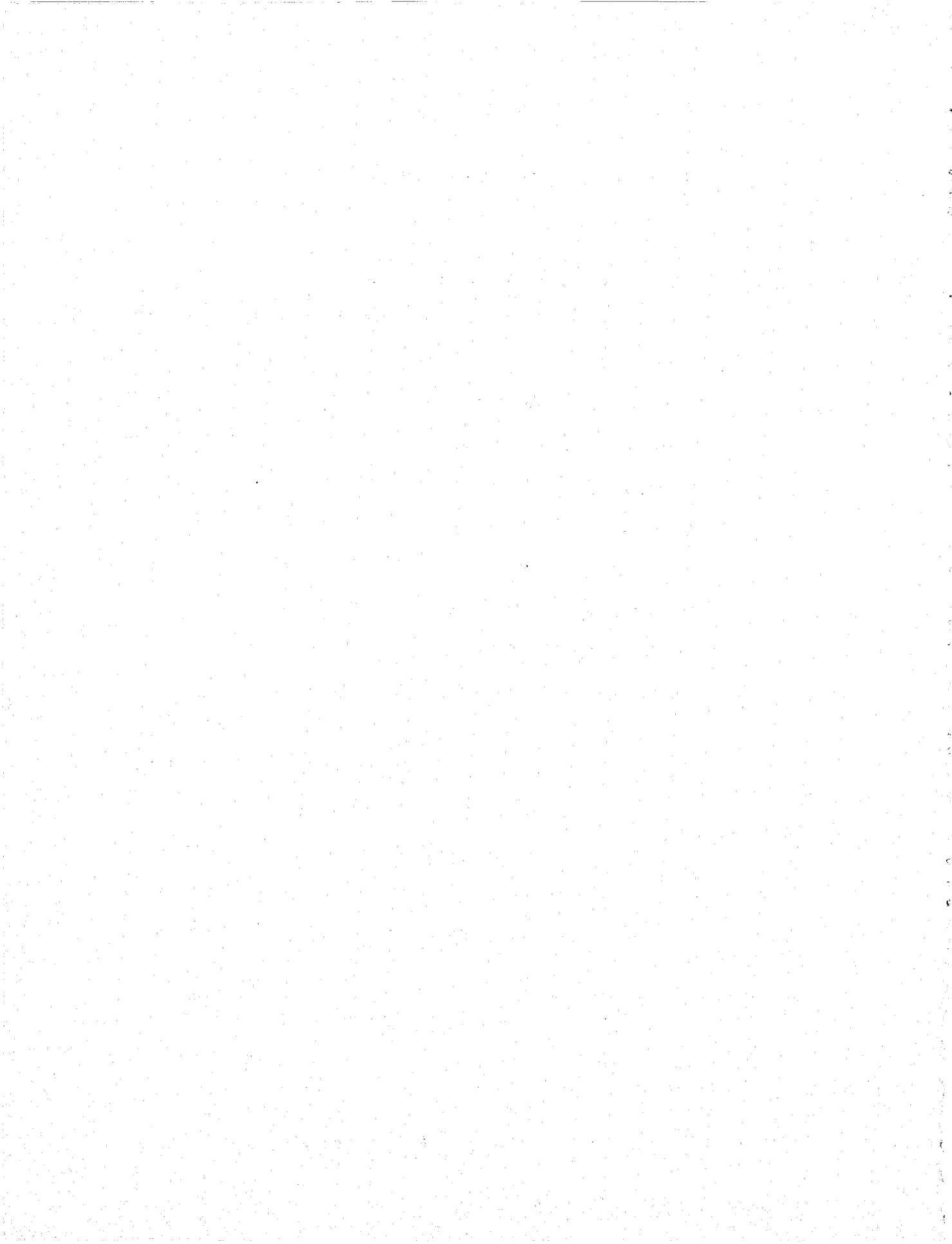


Table 12.8-1

Percent of Family Income Ventured
on Legal and Illegal Gambling*

<u>Percent of Family Income Ventured</u>	Total Sample %	Potential Compulsive Gamblers %	Probable Compulsive Gamblers %
<u>Legal bets</u>			
None	84.2	42.7	45.1
1-5	7.4	35.4	30.3
6-10	0.9	6.9	9.6
11-15	0.5	10.2	0.7
16 or more	0.9	0.8	14.3
Not ascertained	6.1	4.0	0.0
<u>Illegal bets</u>			
None	92.4	90.5	79.3
1-5	1.0	4.5	14.7
6-15	0.1	1.0	4.1
16 or more	0.4	0.0	1.9
Not ascertained	6.1	4.0	0.0

*Note: The percentages of potential and probable compulsive gamblers are based on small samples and the results should be interpreted as order effects rather than in terms of absolute percentages.

Table 12.8-2
Mean Annual Gambling Losses*

	Players Who Lost		
	Total Sample	Potential Compulsive Gamblers	Probable Compulsive Gamblers
Legal betting	\$378	\$1374	\$1798
Illegal betting	275	84	553
Illegal losses as a proportion of total loss	.42	.06	.24
Percent who lost (legal games)	40.9%	86.2%	88.9%
Percent who lost (illegal games)	5.8%	19.1%	30.7%

*Note: The means and percentages for potential and probable compulsive gamblers are based on small samples and should be interpreted as order effects rather than in terms of absolute dollars and percentages.

The mean 1974 gambling losses by bettors who lost in 1974 are presented in Table 12.8-2 for the total sample, the potential compulsive gamblers, and the probable compulsive gamblers. The potential problem gamblers lost, on the average, over twice as much as the general population; the probable compulsive gamblers lost over three times as much as the general population. Further, over twice the percentage of the bettors in the two compulsive gam- groups were net losers compared to the general population. Most of the losses were on legal forms of betting. Among the potential and probable compulsive gamblers the illegal losses were proportionately less than in the general population.

The distribution of losses by type of game are given for the three groups in Table 12.8-3. The potential compulsive gamblers sustained greater losses than the general population across all games. The probable compulsive gamblers sustained greater losses than the general population on all games except bingo and sports cards, and greater losses than the potential compulsive gamblers on all games except bingo, sports cards, numbers, and slot machines. It is notable, however, that the amount lost on slot machines was not ascertained for 20 percent of the probable compulsive gamblers. It is possible that compulsive slot machine players forget how many coins they drop in the slot. The greatest losses, both by the potential and probable compulsive groups, are on horses at the track and casino games. The illegal losses are comparatively small.

12.9 Compulsive Gambling in Nevada

The discriminant weights which were developed in the sub-study of compulsive gamblers were also applied to the scores of the Nevada respondents

Table 12.8-3

Losses By Game: Total Sample, Potential Compulsive Gamblers, and Compulsive Gamblers*

Dollars Lost	Total Sample %	Potential Compulsive Gamblers %	Probable Compulsive Gamblers %
<u>Horses at the track</u>			
None	93	80	79
\$1-\$24	4	5	0
\$25-\$74	2	7	7
\$75-\$299	1	8	2
\$300 or more	*	0	12
<u>Horses with bookies</u>			
None	98	94	77
\$1-\$74	1	2	10
\$75 or more	1	4	13
<u>Bingo</u>			
None	88	60	90
\$1-\$24	5	18	1
\$25 or more	3	13	2
Not ascertained	4	9	7
<u>Sports with bookies</u>			
None	99	97	93
\$1 or more	1	3	7
<u>Sports cards</u>			
None	98	94	97
\$1 or more	2	6	2
Not ascertained	0	0	1
<u>Lotteries</u>			
None	79	53	78
\$1-\$24	15	40	7
\$25-\$74	4	4	11
\$75 or more	1	3	2
Not ascertained	1	0	2
<u>Numbers</u>			
None	97	90	92
\$1 or more	2	9	6
Not ascertained	1	1	2
<u>Slot machines</u>			
None	86	63	55
\$1-\$24	9	12	11
\$25-\$74	3	8	7
\$75 or more	1	11	7
Not ascertained	1	6	20
<u>Casino games</u>			
None	88	74	50
\$1-\$24	5	6	4
\$25-\$74	2	5	3
\$75-\$149	2	4	16
\$150 or more	2	11	21
Not ascertained	1	0	6

*Note: The percentages of potential and probable compulsive gamblers are based on small samples and the results should be interpreted as order effects rather than in terms of absolute percentages.

on the 18 predictor items. The distribution of probabilities of classification as compulsive gambler are presented in Table 12.9-1. Fifteen percent, compared to 16 percent in the national sample, fell into the "at risk" category (probability of classification equal to or greater than .96). These respondents' interviews were screened in detail and the people in the "at risk" group were further subclassified as shown in Table 12.9-2. On the basis of this subclassification, 2.5 percent of the total Nevada sample falls into the "probable compulsive gambler" category, and an additional 2.2 percent is classified as "potential compulsive gamblers." Adjusting these estimates to compensate for errors in prediction, as was done with the national data, leads to an estimated 2.62 percent incidence of probable compulsive gamblers and 2.35 incidence of potential compulsive gamblers in Nevada. This is roughly three times the proportion classified as probable compulsive gamblers in the national sample, but the same proportion of potential compulsive gamblers as in the national sample. When cross-classified by sex of respondent, 3.3 percent of the men and two percent of the women are classified as compulsive gamblers in Nevada, compared with 1.1 and 0.5 percent nationally. An additional 3.8 percent of the men and 1.1 percent of the women are classified as potential compulsive gamblers in Nevada, compared with 2.7 and 2.0 nationally. (Table 12.9-3)

Overall, the data lead to the conclusion that easy access to gambling facilities is associated with a higher incidence of compulsive gambling. This generalization must be taken with extreme caution, however, due to the small numbers of adjudged compulsive gamblers on which the Nevada estimates are based.

Table 12.9-1

Distribution of Probability
of Classification as a Compulsive Gambler
(Nevada Sample; Weighted Data)

Probability of Classification as Compulsive Gambler	Percent of Respondents (Weighted Data)	Unweighted N
.00-.05	34	97
.06-.10	13	36
.11-.20	10	30
.21-.50	15	40
.51-.80	6	19
.81-.95	7	24
.96-1.00	15	49
missing data	*	1
	<u>100</u>	<u>296</u>

*Less than one half of one percent.

Table 12.9-2

Further Classification of the Quantitatively
Determined "At Risk" Group
Nevada Sample

	"At Risk" Group %
Probable compulsive gamblers	19
Potential compulsive gamblers	16
Other pathology	8
Poor comprehension, illiterate	4
Frequent but casual bettors	41
Non-bettors	<u>12</u>
	<u>100</u>

The data on betting habits, however, tend to reinforce the generalization. Also, the Nevada screening questions were intended to eliminate people who purposely moved to Nevada because of the availability of gambling facilities. It is expected that a larger proportion of the people who were screened out are problem or compulsive gamblers than of the "normal" Nevada population we are trying to represent.

As shown in Table 12.9-4, in Nevada 93 percent of the probable compulsive gamblers and 35 percent of the potential compulsive gambler group ventured over 10 percent of their family income on legal forms of betting. These numbers are dramatically higher than in the national sample where the corresponding numbers are 15 percent and 11 percent. Illegal betting is practically non-existent in Nevada compared to other parts of the nation, but a greater percentage of the two compulsive classifications ventured some of their family income on illegal forms of betting.

The mean amount lost on legal gambling by the potential compulsive gamblers in Nevada who did lose in 1974 was not as great as among all Nevada respondents who lost in 1974. Those classified as probable compulsive gamblers lost about eight times as much as the total sample.¹ The average loss on illegal gambling was inconsequential. As with the national sample, about twice the proportion of probable and potential compulsive gamblers were net losers compared to the total sample. (Table 12.9-5)

Losses by type of game are detailed in Table 12.9-6. The absence of losses on illegal activities by potential or probable compulsive gamblers is reflected again here, as is the small amount of

1. The mean dollar amounts lost by probable and potential compulsive gamblers are based on very small samples and should be interpreted as order effects rather than absolute dollars.

Table 12.9-3

Classification as Compulsive Gamblers
and Potential Compulsive Gamblers by Sex
(National and Nevada Samples)*

	Potential Compulsive Gamblers		Probable Compulsive Gamblers	
	Nationally %	Nevada %	Nationally %	Nevada %
Men	2.7	3.8	1.1	3.3
Women	2.0	1.1	0.5	2.0
Total	2.33	2.35	0.77	2.62

Table 12.9-4

Percent of Family Income Ventured
on Legal and Illegal Gambling*
(Nevada Data)

<u>Percent of Family Income Ventured</u>	Total Sample %	Potential Compulsive Gamblers %	Probable Compulsive Gamblers %
<u>Legal bets</u>			
None	64	22	7
1-5	19	43	0
6-10	3	0	0
11-15	2	24	20
16 or more	8	11	73
Not ascertained	4	0	0
<u>Illegal bets</u>			
None	94	89	90
1-5	2	11	10
Not ascertained	4	0	0

*Note: The percentages of potential and probable compulsive gamblers are based on small samples and the results should be interpreted as order effects rather than in terms of absolute percentages.

Table 12.9-5
 Mean Annual Gambling Losses*
 (Nevada Data)

	Players Who Lost		
	Total Sample	Potential Compulsive Gamblers	Probable Compulsive Gamblers
Legal betting	\$1133	\$705	\$9970
Illegal betting	108	0	0
Illegal losses as a proportion of total losses	.09	--	--
Percent who lost (legal games)	47.6%	78.3%	81.7%
Percent who lost (illegal games)	5.2%	--	--

*Note: The means and percentages for potential and probable compulsive gamblers are based on small samples and should be interpreted as order effects rather than in terms of absolute dollars and percentages.

Table 12.9-6

Losses By Game: Total Sample, Compulsive Gamblers
and Potential Compulsive Gamblers*
(Nevada Data)

	Total Sample %	Potential Compulsive Gamblers %	Probable Compulsive Gamblers %
<u>Horses at the track</u>			
\$0	98	100	69
1 or more	2	0	31
<u>Horses with bookies</u>			
\$0	98	100	100
1 or more	2	0	0
<u>Horses at betting parlors</u>			
\$0	96	100	54
1-74	3	0	8
75 or more	1	0	38
<u>Bingo</u>			
\$0	85	76	51
1-24	10	0	22
25 or more	3	24	27
Not ascertained	2	0	0
<u>Sports with bookies</u>			
\$0	98	100	100
1 or more	2	0	0
<u>Sports cards</u>			
\$0	98	100	100
1 or more	1	0	0
Not ascertained	1	0	0
<u>Sports at betting parlors</u>			
\$0	95	89	56
1-24	2	11	7
25-74	1	0	8
75 or more	2	0	29
<u>Slot machines</u>			
\$0	61	65	26
1-24	22	35	22
25-74	7	0	15
75 or more	10	0	37
<u>Casino Games</u>			
\$0	87	43	70
1-74	5	24	0
75-299	5	11	22
300-599	1	11	0
600 or more	2	11	8

*Note: The percentages of potential and probable compulsive gamblers are based on small samples and the results should be interpreted as order effects rather than in terms of absolute percentages.

illegal betting in general. The potential compulsive gamblers sustain greater losses than the general population on bingo, sports at betting parlors, and casino games. The probable compulsive gamblers sustained greater losses than the general population on every legal activity and greater losses than the potential compulsive gamblers on every legal activity except casino games.

Nationally the estimated incidence is less than one percent compulsive gamblers and an additional 2.3 percent potential compulsive gamblers. In Nevada the estimated incidence of actualized compulsive gamblers (2.6 percent) exceeds the estimate of potential compulsive gamblers (2.3 percent), which may suggest that easy access to gambling facilities results in the actualization of those who are predisposed to compulsive gambling. On the other hand the equal proportion of potential compulsive gamblers in Nevada and the rest of the United States suggests the possibility that those who are predisposed to compulsive gambling are drawn to Nevada by the availability of the gambling facilities and once there act out their compulsion. An attempt was made to screen such people out of the Nevada sample, but it is impossible to say whether the screening was completely successful, and this alternative conclusion must therefore be considered. However, we believe, based on all the data at hand, that widespread legalization of gambling will lead to a significant increase in the incidence of compulsive gambling. Operating on the assumption that widespread legalization of gambling in the nation will result in an increase in the incidence of compulsive gambling from the current national estimate of 0.77 percent to the current Nevada estimate of 2.62 percent, the magnitude of the increase could be a jump from the current estimated 1.1 million compulsive gamblers to approximately 3.8 million.¹

¹See footnote, page 77.

APPENDIX A

PROCEDURES

During the summer of 1975 the Survey Research Center conducted two surveys, one national and the other in two Nevada counties and the independent city of Carson City, Nevada, each sponsored by The Commission on the Review of National Policy Toward Gambling. Information was sought on the gambling activities of the United States population 18 years of age and older, on the attitudes and opinions held by that population in reference to both legal and illegal gambling, and on their opinions about governmental policy toward gambling.

The Exploratory Phase

In an effort to gain an overview of the complex gambling phenomenon in the United States, we first undertook an extensive review of existing information. This was followed by a qualitative research program consisting of 16 focus group sessions.

Each group was conducted with 8 to 10 discussants by a professional moderator, according to a preestablished guide. The discussions were all conducted in facilities with one-way mirrors for observation by the research team. Discussants were informed that they were being observed. Each discussant was paid \$10 for approximately 2 hours time. Screening questionnaires administered by telephone were used to select the discussants. Four groups of people who gambled: white-collar males, white-collar females, blue-collar males, and blue-collar females, were conducted in New York City. Similar sets of groups were also conducted in Los Angeles and Detroit. All members of these groups had participated in some gambling. In addition, one male and one female white-collar group session was conducted in Detroit with nongamblers. Two additional sessions were conducted in Detroit with white-collar black males and blue-collar black males who participated in some form of gambling. These sessions isolated and helped us resolve the unique problems inherent in gathering data on a subject as sensitive as gambling.

The Substudy of Compulsive Gamblers

An additional goal of the study was to produce an estimate of the number of potential problem gamblers in the United States who may gamble to the extent that social and family problems would increase if gambling were legalized. To this end, a questionnaire was developed on the basis of previous research in the area of compulsive gambling and administered to 274 known compulsive gamblers from all regions of the United States and a control group of 239 church members from the same cities. The controls were selected from the same areas of the cities in

which the known compulsive gamblers resided. All compulsive gamblers and controls were mailed questionnaires and self-addressed return envelopes. The return rate for the compulsive gamblers was 63 percent and 54 percent for the controls. The data from this substudy served as the basis for a multiple discriminant analysis to select items for the estimation of the incidence of compulsive gambling in the population. Details concerning the item selection and analysis are included in chapter 12.

Pretesting the Interview

Two pretests were conducted prior to the development of the final interview schedules. In the first pretest, 64 respondents were interviewed. Respondents in this pretest were interviewed by the Survey Research Center's field supervisors in various areas of the United States in order to provide information concerning regional differences in terminology and types of games, and in the Detroit/Toledo areas by regular interviewers. On the basis of the first pretest, the interview schedule was revised and a second pretest was conducted with 41 respondents from the Toledo/Detroit/Flint areas. A final revision was made based on the second pretest which additionally accommodated new material required by the Commission.

New York

A special subsection of the questionnaire was prepared for and administered to people living in greater New York City. This section dealt with experience with OTB--the only legal off-track betting facility in the United States outside of Nevada.

New Jersey

Another special section of the national questionnaire was prepared for and administered to people living in New Jersey. Their section dealt with "PICKIT"--the only legal numbers game in the United States which had been in operation for 2 months prior to the interviewing period.

Nevada

In addition to the national survey, 296 respondents were selected from Washoe, Clark, and Carson City Counties, Nevada, to provide a basis for comparison of gambling participation in an area where all forms of gambling are legal. A screening questionnaire was employed to eliminate respondents who had moved to Nevada primarily because of the availability of legalized gambling. In making estimates of any changes in national gambling behavior in the case of legalization of games, it

seemed desirable to exclude individuals who "go where the action is" and base the analyses on the remainder of the population in Nevada. Very few respondents were excluded on this basis.

APPENDIX B

METHODOLOGICAL NOTES

This appendix details the technical aspects of the survey and the analysis. It includes: (1) a description of the sample; (2) comparisons with census data; (3) a discussion of sampling errors and reliability; (4) coding reliabilities; (5) derivatives of annual wagers; and (6) clinical classification procedures.

The National Sample

For the purposes of this research the term national was interpreted to mean conterminous United States. The study population included persons 18 years of age and older living in housing units exclusive of those on military reservations. The sample design and the primary areas are those used by the Survey Research Center (SRC) for a number of years to select national probability samples of household populations.¹ On the hypothesis that participation in gambling activities varies with the geographic location and sex of respondents, disproportionate sampling of the study population was used in respect to both of those variables in order that the relatively small sample of households would yield a sufficient number of respondents knowledgeable about the subject.

The research design required a national sample of about 1,200 interviews selected in such a manner that the sampling rate in Standard Metropolitan Statistical Areas (SMSA's) would be twice the selection rate in non-SMSA's. In addition a supplemental sample of 800 respondents was drawn from the following places:

Boston city	Cleveland city
Bronx borough	Detroit city
Brooklyn borough	St. Louis city
Manhattan borough	Baltimore city
Philadelphia city	Washington, D.C.
Pittsburgh city	Los Angeles city
Chicago city	San Francisco city

The research design specified that about two-thirds of the interviews were to be taken with males and one-third with females. That allocation was achieved by providing interviewers with instructions that assigned sample households to three classes once household

¹See: Kish, Leslie and Hess, Irene "The Survey Research Center's National Sample of Dwellings," Institute for Social Research, The University of Michigan, Ann Arbor, Michigan 1965. ISR No. 2315

composition was obtained: all male, all female, and mixed. Additional instructions to interviewers produced the following results:

In all-male households an objective designation of one respondent was made.¹

In the case of all-female households there were two procedures:

1. Only 30 percent of the one-person households were designated for interviewing;
2. In two-or-more-person households an objective designation of one respondent was made.

In 30 percent of the mixed households (where there was by definition at least one eligible male and at least one eligible female) a female was objectively chosen.

In the remaining 70 percent of mixed households a male respondent was objectively chosen.

The overall sampling rate for households in the SMSA's was approximately 1:30,360, for non-SMSA's about 1:60,720, and for the additional sample in 14 urban places about 1:4,953. Approximately 3,250 households were selected for the sample; of these around 1,700 were in the SMSA areas, 330 in non-SMSA's, and 1,200 in the urban supplement.

After applying instructions to obtain the desired allocation of the sample to male and to female respondents, about 1,760 males and 920 females were selected for interviewing; 1,154 interviews were obtained from the designated males and 595 from designated females. When weighted by appropriate reciprocals of selection probabilities, the overall response rate was 75.5 percent. Of the 24.5 percent of designated respondents from whom interviews were not obtained, 11.9 percent were refusals. Miscellaneous reasons (not at home, illness, language difficulties, and so on) accounted for the remaining 12.6 percent. Comparable figures for the Fall 1975 SRC Omnibus Study were an overall response rate of 72.5 with 16 percent refusals and 11.5 percent miscellaneous reasons.

There were substantial variations in response rates by geographic location and classification of household, and a lesser variation by sex of respondent within geographic locations. To adjust for such variations, the sample was first classified according to the five respondent designation procedures (described in a preceding paragraph);

¹See: Kish, Leslie. A procedure for objective respondent selection within the household. Journal of the American Statistical Association, 44, September, 1949, pp. 380-387.

then within each class, nine geographic groups were defined.¹ For each of the 45 cells in the cross tabulations, the inverse of the household selection probability was divided by the response rate to obtain a weight that adjusted for the variation in both of those factors. The weights employed in the analysis are shown in table B-1. The adjustment for nonresponse implies that within cells, respondents and nonrespondents differ only in respect to their cooperation or noncooperation in granting an interview. While that assumption may be questioned, it is thought preferable to no adjustment for nonresponse.

The weighted response rates by sex and by type of primary area are presented in table B-2. It is apparent from table B-2 that the weighted response rates for men and women are practically identical. The discrepancies occur among the types of primary areas. The rates vary from 88 percent in non-SMSA's to 50.9 percent in the larger cities. For this reason it was imperative that the weights presented in table B-1 be employed in the data analyses.

The weights do not correct for disproportionate selection probabilities within households. To test for the effects of that variation, two sets of estimates were prepared for variables thought to be of critical importance to the study of gambling. Out of 25 comparisons, a difference as large as 1.1 percentage points occurred once; the average difference was a little less than 0.3 percentage points. It was therefore decided to process the data without the correction for disproportionate selection within the household.

As shown in table B-2, the response rates for each type of primary area are somewhat higher in this study than in the Omnibus study conducted just 2 months later. This would indicate that response rate in the large cities, while admittedly low, is not out of line with expected response rates for those areas. More importantly, it does not appear to be low because of the specific topic of gambling, a fact further confirmed by the relatively low refusal rate mentioned earlier.

Since the low response rate in the large city leaves open the speculation that we missed a group of heavy illegal gamblers who are large city dwellers, for respondents in our 12 large cities, we tabulated those demographic characteristics which were related to illegal gambling propensity and for which city census data were also available. In columns 1 to 3 of table B-2a we show the demographic distribution of the total sample, of illegal bettors and of heavy illegal bettors.

¹The nine groups were: (1) Chicago city, (2) Los Angeles city, (3) the three New York boroughs, (4) Philadelphia city, (5) remainder of the 14 urban places, (6) other cities in the SRC self-representing areas, (7) suburban sample in the self-representing areas, (8) other SMSA's, and (9) non-SMSA's.

TABLE B-1.--Sampling weights (inverse of probability of selection of household divided by response rate)^a

Sampling area(s)	Type of household				
	All male	Single female	Multiple female	Mixed	
				Male respondent	Female respondent
Los Angeles	2.20	5.42	3.00	2.54	5.07
Chicago	1.94	7.33	2.25	2.75	8.44
New York	3.37	10.26	6.00	4.34	8.46
Philadelphia	2.00	11.67	1.50	2.22	7.41
Other large cities ^b	1.37	5.13	1.71	2.27	4.72
Other self-representing cities	12.92	33.27	21.39	17.83	37.81
Self-representing suburbs	8.91	38.39	9.98	13.95	33.77
Non self-representing SMSA's	10.33	34.86	11.41	13.29	30.38
Non-SMSA's	19.01	55.45	21.39	22.79	53.21

^aAll weights are in units of 4,258.555 households.

^bOther cities included in the Supplemental Sample (see text).

TABLE B-2.--Weighted response for the total sample by sex, and type of primary area

	1974 Gambling study	1974 Omnibus study
All sampled persons	75.5%	72.5
Men	75.6	NA
Women	75.4	NA
Non-SMSA's	88.0	78.7
Large cities	50.9	43.8
Other SMSA's	72.9	73.6

NA = not ascertained

TABLE B-2a

	Col 1	Col 2	Col 3	Col 4	Col 5
				<u>Center large cities</u>	
	<u>Total sample</u>	<u>Illegal bettors</u>	<u>Heavy illegal bettors</u>	<u>1974 Sample</u>	<u>1970^a Census</u>
<u>Sex</u>					
Males	46	75	88	46 ^b	53
Females	54	25	12	54	47
<u>Income^c</u>					
Under \$5,000	14	3	2	13	21
\$5,000-\$9,999	19	15	18	25	32
\$10,000-\$14,999	23	22	24	25	25
\$15,000 or more	44	60	56	27	22
<u>Race^d</u>					
White	89	86	80	68	68
Nonwhite	11	14	20	32	32
<u>Education^e</u>					
Less than 5 years schooling	8	4	7	8	7
5-11 years	27	23	20	30	46
High school graduate and/or some college	49	57	67	49	37
College graduate or more	16	16	6	13	10
<u>Occupation^f</u>					
Prof., managerial, technical	28	27	14	24	23
Sales and clerical	21	19	20	29	33
Craftsmen, foremen	14	18	23	13	12
All others	36	35	43	34	31
<u>Industry^f</u>					
Manufacturing	21	21	28	20	27
Wholesale and retail	15	15	11	15	21
Services, government	32	31	30	42	29
Education	10	5	*	7	7
Construction	6	6	8	4	4
All others	16	22	23	12	12

^aCounty and City Data Book, A Statistical Abstract Supplement, U.S. Dept. of Commerce Publication, 1972.

^bThe study utilized a two-thirds sampling fraction for males, yielding 65 percent males in the 12 large cities which was weighted to approximate national levels.

^cFor comparability to census data, percentages were based on only individuals for whom income was ascertained. NOTE: Census data reports income in 1970 dollars while the survey reports income in 1974 dollars.

^dFor comparability to census data, Spanish-speaking surnames are included in white.

^eFor comparability to census data, percentages are based on respondents 25 years or older.

^fFor comparability to census data, percentages are based on currently employed individuals.

In columns 4 and 5, we show the corresponding demographic distributions in the large city sample and the census characteristics for those same large cities.

An analysis of columns 1 to 3 of this table indicates that heavy illegal bettors are more likely to be found among males, among those with incomes above \$15,000, among nonwhites, among those who graduated high school but did not graduate college, among craftsmen and foremen and among those who are employed in the manufacturing and construction industries.

An analysis of columns 4 and 5 indicates that compared to the census, with two exceptions, our large city sample contains an equal or greater proportion of individuals in groups from whom illegal gamblers are most likely to be drawn. Specifically, census data estimates 22 percent with incomes over \$15,000, our sample contains 27 percent; census estimates 32 percent as nonwhite as does our sample; census estimates 37 percent have a high school degree but no college degree while our sample contains 49 percent in this educational category; and census and the sample put craftsmen and foremen at around 12 percent. Weights were assigned to bring the resulting sample distribution of key characteristics into equality with the nationwide census. As a consequence, the distribution of characteristics within a subsample such as residents of central cities does not exactly match census figures for these same cities. Nevertheless, B-2a shows favorable comparison on all key characteristics.

The largest discrepancy is in sex ratio. Although nearly twice as many men as women were interviewed, when weights are adjusted to match the national sex ratio, weighted percentages for males in central cities is 7 points below the census figure. Since males are heavy illegal gamblers, it is tempting to raise the weight for male respondents, but to do so would only seriously distort sample distributions of income, education and other characteristics related to illegal gambling, offsetting any "gain" from the change in sex weighting and reducing the reliability of the sample.

Comparisons with Census Data

Table B-3 presents the percentage distribution by age, sex, race, and region for both the national project data and Census Bureau data. All Census Bureau estimates except region are taken from the July 1974 census figures. The most recent census data available for the regional distribution were 1970 figures.¹

¹United States Department of Commerce, 1974 Population Estimates and Projections, Series P-25, No. 529, September, 1974, and 1970 Census, General Population Characteristics, United States, Summary Table 57.

TABLE B-3.--Estimates of distribution by age, sex, race, and region from project data and Census Bureau data

	Project data (weighted) %	Census Bureau data %
<u>Age</u>		
18-24 years	13.9	18.5
25-44 years	42.5	36.4
45-64 years	31.4	30.0
65 or over	<u>12.2</u>	<u>15.1</u>
	100.0	100.0
<u>Sex</u>		
Male	46.3	47.6
Female	<u>53.7</u>	<u>52.4</u>
	100.0	100.0
<u>Race</u>		
White	84.8	88.5
Other	13.1	11.5
Not ascertained	<u>2.1</u>	<u>--</u>
	100.0	100.0
<u>Region</u>		
West	17.8	17.1
North-Central	28.1	27.5
Northeast	23.1	24.7
South	<u>31.0</u>	<u>30.7</u>
	100.0	100.0

Table B-3 shows that people in the 18-24 and 65 and over age ranges are underrepresented and people in the 25-64 age range are overrepresented in the current sample as compared with Census Bureau data.

It must be recalled that census figures are based on a somewhat different universe, including Alaska, Hawaii, and members of the Armed Forces in the United States.

The distribution by sex and region are quite close for the project and census data, with no differences greater than 1.6 percent. White respondents are underrepresented as compared with the census data, and other respondents overrepresented.

The Three-Area Sample in Nevada

The Nevada sample was designed to give equal probability of selection to each household in Carson City, Washoe and Clark Counties, exclusive of households on military reservations. From a probability sample of about 140 city blocks and clusters of rural housing, selected with probabilities proportional to the estimated number of housing units, approximately 700 housing units were designated for the sample. About 200 sample units were located in Carson City and Washoe County and the remaining 500 in Clark County. Because of special respondent eligibility criteria, described in subsequent paragraphs, there was a departure from proportionate representation. The housing unit selection rate in Carson City and Washoe County was approximately 1:314; in Clark County where the eligibility rate was lower, the sampling fraction was increased to about 1:266.

Following the design used for the national study, sample Nevada households were assigned to five classes, according to the number and sex of household members 18 years and older; then preassigned sampling rates resulted in the designation of male and of female respondents in the ratio of two to one.

Of the desired target of 300 interviews, 296 were obtained, of which 194 were with male respondents and 102 with females. When responses were weighted to correct for disproportionate selection rates by county, type of household, and sex of respondent, the response rate was 70 percent. Among the 30 percent of designated respondents who did not grant interviews, 16 percent were refusals and 14 percent were unable to cooperate for other reasons. As in the national sample, weights used in the Nevada analysis correct for disproportionate selection of households and for nonresponse, but not for disproportionate selection rates within households.

For the Nevada study, the research design excluded from the study universe all household members: (1) who had only recently moved to Nevada; (2) whose place of permanent residence was in another state; (3) or who had moved to Nevada primarily because of the gambling

facilities. Following the respondent selection process used for the national sample, Nevada interviewers first determined a potential respondent; then by means of a brief screening interview on Nevada residence, the individual's qualifications for inclusion in the sample were established.¹ The noneligibility rate for both reasons in Clark County was 31 percent while the rate in Carson City and Washoe County was 17 percent.

Coding Reliabilities

Prior to keypunching the information in the interviews onto IBM cards, the information was first transcribed from the interviews onto coding sheets. The coding process is one in which there is a possibility of clerical error. Consequently, a predetermined proportion of the interviews were independently recoded by a person more centrally involved with the management of the study than the original coder. It is customary to report the degree of agreement between the original coder and the "check coder" in percentage agreement terms. In the current study the percentage agreement was over 99.9 percent, which means that the original coder and the check coder assigned the same category number to at least 999 out of every 1,000 responses.

Expansion to the National Population

The projections from the survey data to the United States population figures used a resident population estimate of 144,129,000 adults 18 years of age or older.²

Sampling Errors and Significance of Differences

Since the results of this study are derived from a sample of only 1,736 individuals, rather than from the total United States population, they would be expected to differ somewhat one way or another from what a complete census would reveal. Sampling theory, however, enables us to assign probable limits to the extent of these differences depending on how the sample was chosen, the number of individuals observed and the variation of behavior from one individual to another. If the sample of 1,736 individuals had been chosen simply at random from the United States population, the .99 confidence limits to sample percentages would be about 2.8 percentage points. The meaning of this statement is best shown by example. Calculations show that 61 percent of the 1,736 individuals surveyed in our sample placed a bet on one thing or another during 1974. Now if a complete census were taken, we would surely find

¹See Appendix E for Nevada Screening Questionnaire.

²U.S. Department of Commerce, op. cit.

a somewhat different result and our sample would be shown to be in error one way or the other by some specific amount. We have no way of knowing either the amount or the direction of the error, but we do know that the chances are 99 to 1 against an error larger than 2.8 percentage points either way. In other words we have great confidence that the census result would prove to be somewhere in the range of 58.2 to 63.8 percent.

Likewise, the .99 limits to the difference between two sample percentages would be 4.0 percentage points. For example, 24.1 percent of the 1,736 individuals in the sample reported playing bingo in 1974 compared to 13.9 percent who bet on horses at the track. The difference between these two is 10.2 percentage points in favor of bingo. Again, a complete census would surely reveal not only somewhat different percentages of bingo and horse players, but also a difference that would be smaller or larger than the sample result of 10.2 percentage points. But we have great confidence that the difference as determined from the census would fall in the range 10.2 ± 4.0 percentage points.

Another way to say this is that a difference of four percentage points between two sample percentage figures is significant at the .01 level. That is, it signifies that we can have great confidence that a difference in the same direction would be observed in a complete census.

Percentages (and differences in percentages) derived from only a part of the sample are subject to somewhat greater error than those based on the entire sample. For example, it is observed that of the 210 individuals in our sample who live in States with no legal gambling, 41.5 percent reported placing a bet on something during 1974. Because of the small number of individuals in the subsample, the .01 significance limits to this finding are about 8 percentage points.

The error limits given would apply to a simple random sample. The sample actually employed here, however, differs from a simple random sample in two important ways. In the first place, the sample is stratified to assure the proper representation of all groups and is particularly designed to obtain proper representation of those groups whose behavior is especially important in the study of gambling. This stratification makes a sample of a given size more accurate than a simple random sample and tends to reduce the error limits.

In the second place, however, the sample was clustered. That is, the sample was gathered by selecting sampling areas and then interviewing several people from each area. This procedure greatly reduces interviewing expense, but at the cost of reduced accuracy for a sample of given size.

Since these two effects tend to cancel each other, the net effect is error limits very much like those from a simple random sample.

Reliability of Individual Means

Estimates of average bet per bettor presented in table 1.6 are subject to sampling variation. In general, the larger the number of cases on which the average is based, the smaller its standard error. Number of cases, means, and standard errors for individual games are shown in appendix B, table B-4.

Calculation of Dollar Amounts Bet on Individual Gambling Activities

In order to arrive at annual dollar amounts bet respondents were asked a series of questions about frequencies of betting and average amounts bet. For example, the following sequence was asked about betting on horses at tracks:

E9. How many days did you go to the track in this State in 1974?

_____ V217

E10. How many days did you go to the track in some other State in 1974?

_____ V218

E12. How many races do you usually bet on when you are at the track?

_____ V220

E13. What is your typical bet on a race?

\$ _____ . _____ V221
DOLLARS CENTS

E15a. Do you bet on special combination events like the daily double, exactas, perfectas, and so forth?

_____ V224

E15b. How much do you usually bet on these during a day at the races?

\$ _____ . _____ V225
DOLLARS CENTS

TABLE B-4.--Standard errors of estimated average bet per bettor, by type of game, United States and Nevada only

	Number of cases	Mean bet	Standard error
<u>United States Total</u>			
<u>Legal</u>			
Horses at track	284	\$448	\$118
Off-track betting parlors ^a	26	1118	613
Slot machines			
Keno	179	448	108
Casino games			
Bingo	258	74	9
Lottery ^b	512	25	1.60
<u>Illegal</u>			
Sports books	53	623	199
Horse books	75	416	150
Numbers	103	273	76
Sports cards	85	44	19
<u>Nevada</u>			
<u>Legal</u>			
Horses at track	9	103	35
Off-track betting parlors	23	179	69
Slot machines	202	377	76
Keno	NA	NA	--
Casino games	91	846	160
Bingo	62	104	30
Sports betting parlors	29	158	67
Sports cards	6	36	13
<u>Illegal</u>			
Sports books	11	275	133
Horse books	5	131	113

^aNew York only.

^bStates with legal lottery only.

In order to calculate the yearly bet for an individual bettor, we multiplied the amounts referenced by variable numbers as follows:

$$(V217 + V218) \times [(V220 \times V221) + V225]$$

$$(\# \text{ days own State} + \# \text{ days other State}) \times [(\# \text{ races per day} \times \$ \text{ bet per race}) + \text{Exotic betting}]$$

An alternative calculation using the following questions was also performed:

E14. How many horses do you usually bet on in a single race?

_____ V222

E15. What is your typical or average bet on a horse?

\$ _____ V223
DOLLARS CENTS

$$(V217 + V218) \times [(V220 \times V222 \times V223) + V225]$$

The two calculated amounts substantially agreed. Where the two amounts differed, an inspection of the interviews with discrepancies revealed that the typical bet per race information was usually better because respondents sometimes made two bets on the same horse (win and place), and the term "average bet on a horse" was ambiguous: a person may place two \$2 bets on a horse, but the total bet for the horse is \$4.

Another simpler example of dollar calculations is bingo. From the following questions, V330 X V335 (number of days times amount per day) gave us a yearly bingo total:

G6. How many different days last year, that is in 1974, did you play bingo for money?

_____ V330

G9. How much do you usually spend for cards in an afternoon or evening of bingo?

\$ _____ V335
DOLLARS CENTS

Total amounts for lottery tickets were calculated as follows:

a. Group purchases:

K7. What was the total amount the group spent on lottery tickets each time it made a purchase?

\$ _____ V498
DOLLARS CENTS

K7a. How much money did you yourself put in each time?

\$ _____ V499
DOLLARS CENTS

K8. What price lottery tickets did your group buy? (CHECK BOXES IN COLUMN A.)

<u>COLUMN A</u>	<u>COLUMN B</u>
() 25¢	_____ V500
() 50¢	_____ V501
() \$1.00	_____ V502
() \$2.00	_____ V503
() \$3.00	_____ V504
() \$5.00	_____ V505
() SEASON	_____ V506
() OTHER*	_____ V507

* Converted to dollar total _____
WRITE IN

$$\begin{aligned}
 & (V499 \div V498) \times [(V500 \times 25) + (V501 \times 50) + (V502 \times 50) + (V502 \times 100) \\
 & + (V503 \times 200) + (V504 \times 300) + (V505 \times 400) + (V505 \times 500) + \\
 & (V506 \times 2500) + V507] \div 100
 \end{aligned}$$

Alternative calculations were made for many of the dollar amount variables. When more than one method was available, inspection of the pattern of discrepancies usually revealed one calculation method to be superior. Where individual discrepancies could be reasonably resolved, the variables were corrected to make them consistent.

The rest of the questions used for dollar calculations may be found in the Appendix D: Questionnaire. They are referenced here by question number.

1. Horses with a bookie
E22 X [(E23 X E24) + E26b]
2. Off-track betting on horses--New York only
F30 X [(F32 X F33) + F35b]
3. Sports with a bookie:
(H8aA + H8aB + H8aC + H8aD + H8aE + H8aF + H8aG + H8aH + H8aI)
X H9
4. Sports Cards
H14 X H16
5. Lottery ticket purchases:
 - b. Own

Same method as group purchases except not multiplied by the ratio of the individual contribution to the group purchase.
See K13.
6. Numbers:
L3 X L4
7. Pickit--New Jersey only:
M20 X M21
8. Casinos
N5(N6 X N7)

Notes: (1) The few cases of junkets (N8) were converted back to N7. (2) Only people who went to a casino in 1974 (N5 not zero) were included.

Clinical Classification Procedures

Subsequent to the quantitative classification of respondents as compulsive gamblers outlined in chapter 12, the 328 interviews which were classified with a statistical probability of over .95 were examined in detail and subclassified into the following categories:

- (1) Probable compulsive gamblers;
- (2) Potential compulsive gamblers;
- (3) Other pathology;
- (4) Poor comprehension or illiteracy; and
- (5) Others.

The subgrouping was based on the comments made by the interviewer in the "thumbnail sketch" at the end of the interview as well as the record of the respondent's betting behavior. This clinical subclassification of the quantitatively determined "at risk" respondents is the most thorough examination of the available data possible within the time constraints of the study. Of course, any clinical classification

is subject to errors of human judgment. Ratings by multiple judges would have been preferred, but time did not permit, and there are consequently no data available on interrater reliability. Examples of some interviews classified into the five subgroups follow.

Probable Compulsive Gambler

1. The interviewer recorded that the respondent seemed to boast about his gambling experience and commented in response to one question that he "had more than 2 months income in his pocket right this minute." The respondent had a heart condition at present so had to phone his bets in to his bookie. He bet \$50 a race. When asked how many trips he had made to gamble at a casino, he responded that he didn't remember exactly but it was around 40 or 50. On the last trip, he lost about \$1,000 at the tables.

2. The respondent was a 29-year-old widower who lived with his mother. He made three trips in 1974 from his home in the North Central United States to gamble at the casinos in Las Vegas. He was also a frequent bettor on sports with friends, played bingo frequently, played cards with friends frequently, and bought lottery tickets each day. In addition, he bet on horses at the track, numbers, and several miscellaneous items.

3. The respondent was a heavy bettor on horses at the track, sports with friends, sports cards, and lotteries. The interviewer commented that the respondent was at times "hazy" in his answers to questions about how many days he had bet on sports in 1974.

4. The respondent commented that he had "greatly reduced" his gambling since his daughter was born. He still reported betting heavily on the horses, sports with friends, numbers, and at casinos.

Potential Compulsive Gamblers

1. The respondent was a frequent bettor on horses, bingo, and at casinos. Infrequent bets were made on sports with friends and lotteries. The gambling, although frequent, did not appear to be out of control.

2. The respondent bet regularly on horses at the track and with bookies, as well as on several miscellaneous items. He was an infrequent bingo and lottery player. Betting was regular but seemingly not out of control.

3. The respondent was a 31-year-old bachelor who placed frequent bets with bookies on sports and horses, bet regularly on sports cards, numbers, and sports with friends. The betting behavior was regular but within his means.

4. The respondent was a frequent casino bettor and bet infrequently on miscellaneous events. On his last trip to Las Vegas he lost more money than he had taken with him for gambling.

Other Pathology

All of these respondents had some pathology noted by the interviewer. Examples are:

1. The "woman was crippled by arthritis, grieving for her dead husband for six years and was out of touch with things."

2. The respondent said "he does not get around anymore as he is an alcoholic. He stays away from people who do those things."

3. "Near the end of the interview the respondent said he had something wrong with him and the doctors didn't know what it was. He takes two kinds of pills all the time. It seems he has some sort of spells that come on all of a sudden and he says terrible things to people and acts awful. Two VA hospitals have certified him 'disabled to work.'"

4. "This respondent is completely disabled. . . . He has had a stroke and hasn't been out of the house for five years (except) to go to the hospital."

Poor Comprehension or Illiterate

All respondents in this category were either unable to read or had difficulty with the instructions. Such problems were specifically recorded by the interviewer and examples are not necessary.

Others

This group of respondents showed no indication of either heavy betting nor did the interviewers' comments indicate any other problem. The literature indicates that people who are compulsive gamblers are persistent and subtle in their concealment of their gambling from others. It is possible that there are some compulsive gamblers who managed to conceal any evidence of their gambling from the interviewers. Even though the estimated incidence of compulsive gambling was adjusted for errors in statistical prediction, it is possible that the figure is low due to such concealment.

APPENDIX C

GLOSSARY

- ABOLISHED:** Stopped, discontinued, made not legal any more.
- BACCARAT:** A card game.
- BACKGAMMON:** A board game played with dice and movable pieces. Not to be considered a dice game.
- BLACKJACK (or 21):** A card game, but in the casino section we are separating it from card games for revenue estimation purposes.
- BLIND PIG:** An illegal, usually after-hours, drinking establishment which may also have illegal gambling associated with it. If casino games, such as cards, dice, or roulette are included we consider it a casino. Sometimes called a Moon Parlor.
- CASINO:** Anyplace where one can place bets against the house on cards and/or dice games, roulette, etc.
- CHUCK-A-LUCK:** A game played in casinos (Dice in a cage).
- CRAPS:** Another word for dice games in general.
- FIXED:** A dishonest game, race, or contest. A game in which the outcome is manipulated by someone. One hears of games or boxing matches being "thrown" or a player being paid to "take a dive". There are also more subtle ways of manipulating an outcome, for instance a race horse who doesn't like blinders may be run with blinders as a way of holding him back for a preferred event or to increase the odds.
- HANDLE:** The aggregate amount ventured. In lotteries it is the total dollar volume of tickets sold. One may speak of the daily handle at a local race track or the annual handle on illegal betting.
- HOUSE:** A gambling establishment that takes bets and pays the winners. Even if one plays a pinball machine in a bar and receives money from the owner for games won, he is "playing against the house."

- JAI-ALAI:** A sport something like paddleball only much faster and played with curved wickets. Betting on the players is legal in Florida and Nevada at the time of the interview.
- JUNKET:** Blanket-priced trips for groups to gambling casinos. Included in the blanket price is usually a stake, whether in chips or credit, for gambling.
- KENO:** A sort of bingo played in the Nevada casinos and perhaps elsewhere. One buys a ticket for a small price and chooses anywhere from 3-15 numbers. The 15 numbers are selected from a container as in bingo. To win anything you must have chosen a specified number of the drawn numbers. The more of the drawn numbers you have, the higher the payoff.
- LINE OF CREDIT:
(or credit line)** A bettor is given an amount of credit by the house, thus providing (or increasing) the money he has to gamble above the actual cash he has with him.
- LONG SHOT:** A bet on some event where the odds of winning are very small. Betting on a rural high school football team to win against Ohio State would be a very long shot.
- MAHJONG:** A Chinese game played with tiles.
- ODDS:** There are betting odds and statistical odds. If a bettor gets odds of 5 to 1 on a bet, he receives \$5 for each dollar bet. Thus, assuming he wins he realizes a \$4 profit.
- OFFICE POOLS:** These pools usually are run informally on a given event (e.g., the World Series, the Super Bowl, or the date of the birth of a child). Generally a chance is purchased at a given amount (say 50¢ or \$1) and participants may purchase as many chances as they wish. As a rule the person with the winning number (e.g., 7 for a combined score of 3 to 4 in a World Series game) wins the pot.
- OFFICE CHECK
POOLS:** A pot which consists of bets made by participating employees and the winner takes all, with no outside person sharing the winnings. There are potentially an infinite number of ways to play this game. One straightforward way, for example, is to draw a number and the person who has the check with a serial number matching the drawn number wins the pot.
- PAYOFF:** A bribe, usually paid to continue an illegal gambling operation.
- PAYOUT:** The amount paid to winners.

- POKER: A card game.
- SLOT MACHINES: A machine in which one puts in a nickel, dime, quarter, half dollar, or silver dollar, then pulls a lever and watches three spinning wheels with pictures of fruit on them (in Great Britain they are called "fruit machines"). Depending on the combination of pictures of fruit which appear when the wheels stop, one gets a certain number of coins dropped out in a cup at the bottom or one gets nothing.
- STAKE: The amount of money one has to gamble with.
- TAKE (or TAKE-OUT): The gross profit after paying winners. Operating costs are paid out of the take.
- RUNNER: An individual who works for someone in the business of taking illegal bets. His job is either to pick up money being bet by bettors or bring them the money they won.

BINGO-BEANO

People generally purchase cards with rows and columns of numbers on them. The columns have letters at the head of them. The players are usually seated around a large ring of tables with the announcer situated inside the ring. The announcer randomly picks numbers from a mixing device and calls out the column heading and the number. The first person to fill a column or row or some other string of numbers wins either some cash or a prize. THIS SHOULD NOT BE CONFUSED WITH KENO WHICH IS A CASINO GAME.

BOOKMAKERS (BOOKIE)

A person who accepts illegal bets. The bets are generally on horse races and/or sports events. Running a book is the business the bookie is in. Most large scale bookie operations are conducted by phone and cash settlement is generally made by a runner who either pays off or collects from the bettor.

LOTTERIES

Lotteries are now legal in 11 states and are either in the planning or legislative stages in several others. The actual method of the lottery operation varies by state, but the principle is the same. People may legally purchase lottery tickets from licensed vendors, usually grocery stores, banks, drug stores, etc. for prices ranging from 25 cents to 5 dollars. Sometimes season tickets may be purchased. Changes are constantly being made to attract bettors. There may be daily drawings, weekly drawings, monthly jackpots, million dollar winners, etc. The main difference between the legal lotteries and New Jersey's new legal numbers game (Pickit) is that lottery bettors do not get to choose their own numbers (with the exception in some states of the people who buy season tickets). Even the season ticket buyers are unable to pick a new number each day unless they buy a new season ticket each day.

NUMBERS GAME (PLAYING THE NUMBERS)

Also referred to as bolitas or policy. In the past it has been called the "poor man's lottery." Similar to a lottery except that the person is allowed to choose his own number from 000 to 999 and bet any amount he wishes. Pay-off is six days a week and based on published results of the daily handle or odds on winning horses of certain races at a specified race track (see Figure 2 for an example). Bets are generally handled by a local runner. Currently only New Jersey has a legal numbers game, operated by the state and called "Pickit." In most numbers games the payout odds for winners usually range from 499 to 534 to 1. The statistical odds of picking a winning number, assuming an honest game, are 1,000 to 1.

OFF TRACK BETTING (OTB)

Betting on horses away from the track. This may be done legally in Nevada and New York City, as long as it is done through official outlets. In New York there is a 5% surtax on each bet (e.g., it costs \$10.50 to make a \$10.00 bet) and the Nevada surtax recently was cut from 10% to 2%. Betting may also be done illegally through a bookmaker or a bookie. Bookmakers or bookies may or may not pay track odds. They usually pay less than track odds on a long shot, where the payout is very large if the horse happens to win.

PARIMUTUEL

A system of determining odds depending on the amount bet on a horse or dog. The greater the amount of money bet on a horse, the lower the odds, and consequently the lower the payout. Most race tracks now have computerized parimutuel systems for figuring the odds. These odds which may change a great deal during the period immediately preceding a race are flashed on a "tote board" in the infield so that bettors are kept informed of the odds and changes in the odds. Dog tracks also use a parimutuel system for computing odds.

POINT SPREAD (SPORTS EVENTS)

The number of points quoted by odds makers that one team will win by in sports events. If a bookie gives you Ohio State and 7 1/2 points against The University of Michigan, and you bet on Ohio State, then Ohio State must win by more than 7 1/2 points before you win your bet.

SPORTS CARDS OR SPORTS SHEETS

Also referred to as pool cards. (See Figure 2) Another illegal form of betting on sports events. Point spreads are given for several professional and college games. If the bettor's choices are all correct he gets paid greater odds with an increasing number of correct choices. Consolation

prizes are sometimes given to those who are correct in all choices but one. The odds against making all correct choices mount much faster than the odds the bettor is given with an increasing number of choices. These cards are distinct from office pools, and are usually purchased from news stands, drug stores, or from a co-worker.

TRACK ODDS

The odds quoted on horses by the parimutuel system at the track.

D-1
Exhibit Cards

CARD A

In the year 1974

0. NEVER
1. RARELY (1 to 5 times a year)
2. INFREQUENTLY (About every other month)
3. SOMETIMES (About once a month)
4. REGULARLY (About twice a month)
5. OFTEN (About once a week)
6. FREQUENTLY (More than once a week)
7. VERY FREQUENTLY (Almost every day)

P. 466200

CARD B

- A. LESS THAN \$5
- B. \$5 to \$9
- C. \$10 to \$14
- D. \$15 to \$19
- E. \$20 to \$24
- F. \$25 to \$29
- G. \$30 to \$39
- H. \$40 to \$49
- I. \$50 to \$74
- J. \$75 to \$99
- K. \$100 to \$149
- L. \$150 to \$199
- M. \$200 OR MORE

P. 466200

CARD C

- A. LESS THAN \$100
- B. \$100 to \$299
- C. \$300 to \$499
- D. \$500 to \$749
- E. \$750 to \$999
- F. \$1,000 to \$1,999
- G. \$2,000 to \$2,999
- H. \$3,000 OR MORE
- I. TOOK VACATION BUT DID NOT SPEND ANYTHING
- J. DID NOT GO ON VACATION

P. 466200

CARD D

- A. BETTING ON HORSES AT HORSE TRACKS
- B. OFF-TRACK BETTING ON HORSES AT BETTING PARLORS
- C. PLAYING BINGO WHERE YOU PAY TO PLAY
- D. BUYING LOTTERY TICKETS
- E. NUMBERS, BOLITAS, OR POLICY GAME
- F. SLOT MACHINES
- G. PLAYING GAMES AT GAMBLING CASINOS
- H. BETTING ON SPORTS CARDS OR SHEETS
- I. BETTING ON SPORTS EVENTS AT BETTING PARLORS
- J. BETTING ON THE DOGS AT DOG TRACKS
- K. BETTING ON PROFESSIONAL SPORTS EVENTS EXCLUDING BETS WITH FRIENDS
- L. BETTING ON COLLEGE SPORTS EVENTS EXCLUDING BETS WITH FRIENDS
- M. BETTING ON HIGH SCHOOL SPORTS EVENTS EXCLUDING BETS WITH FRIENDS

P. 466200 - N

D-2
Exhibit Cards

CARD D - 1

DEFINITELY IN FAVOR OF LEGALIZATION
TEND TO FAVOR LEGALIZATION
TEND TO BE AGAINST LEGALIZATION
DEFINITELY AGAINST LEGALIZATION

P. 466200

CARD E

1. MOST OF THE TIME
2. PRETTY OFTEN
3. SOMETIMES
4. ALMOST NEVER
5. NEVER

P. 466200

CARD F

CAN BE DONE:
A. BY PHONE
B. WHERE THEY WORK OR LIVE
C. NEAR WHERE THEY WORK OR LIVE
D. SOMEWHERE ELSE THAT'S EASY TO GET TO
E. SOMEWHERE ELSE THAT'S HARD TO GET TO
F. CAN NOT BE DONE IN THIS AREA

P. 466200

CARD G

1. I HAVE OTHER THINGS TO DO
2. I DON'T THINK ABOUT IT
3. I DON'T KNOW ANYTHING ABOUT IT
4. I'M NOT INTERESTED IN THE GAME ITSELF
5. IT'S NOT LEGAL AND I DON'T WANT TO DISOBEY THE LAW
6. IT'S NOT LEGAL AND I DON'T WANT TO GET ARRESTED
7. IT'S WRONG
8. THERE IS SOMETHING SHODDY ABOUT IT
9. IT'S SINFUL
10. PEOPLE BECOME UNPLEASANT
11. THE ODDS ARE AGAINST YOU
12. I'M NOT LUCKY
13. I DON'T WANT TO LOSE MONEY
14. IT'S A WASTE OF MONEY
15. I DON'T HAVE THE MONEY
16. IT'S A WASTE OF TIME OR EFFORT
17. IT'S NOT AVAILABLE
18. SOME OTHER REASON NOT LISTED

P. 466200

D-3
Exhibit Cards

CARD H

- A. \$1 to \$24
- B. \$25 to \$74
- C. \$75 to \$149
- D. \$150 to \$299
- E. \$300 to \$599
- F. \$600 to \$999
- G. \$1,000 to \$1,999
- H. \$2,000 to \$2,999
- I. \$3,000 to \$4,999
- J. \$5,000 to \$9,999
- K. \$10,000 to \$14,999
- L. \$15,000 to \$19,999
- M. \$20,000 OR MORE

P. 466200

CARD I

- A. TELEPHONE SERVICE
- B. CREDIT
- C. FLEXIBLE SETTLEMENT DATES
- D. PAYOFF AS GOOD AS I GET NOW
- E. NO INCOME TAXES ON WINNINGS
- F. WOULD NOT PLAY NO MATTER WHAT FEATURES
- G. NONE NECESSARY

P. 466200

NEVADA

CARD J

- 1. I PLAY TO HAVE A GOOD TIME, IT'S ENJOYABLE OR FOR RECREATION.
- 2. I PLAY TO PASS THE TIME.
- 3. I PLAY BECAUSE IT'S SOMETHING TO LOOK FORWARD TO.
- 4. I PLAY FOR THE CHALLENGE.
- 5. I PLAY TO MAKE MONEY.
- 6. I PLAY FOR THE CHANCE OF GETTING RICH.
- 7. I PLAY OUT OF HABIT.
- 8. I PLAY FOR THE EXCITEMENT.
- 9. I PLAY BECAUSE I'M LUCKY.
- 10. I PLAY BECAUSE I HAVE A BETTER CHANCE TO WIN THAN OTHER PEOPLE.
- 11. SOME OTHER REASON NOT LISTED.

P. 466200

CARD KN

- A. BLACKJACK
- B. ROULETTE
- C. CRAPS
- D. POKER, AND CARD GAMES OTHER THAN BLACKJACK
- E. SOMETHING ELSE

P. 466200

NEVADA

D-4
Exhibit Cards

NEVADA

CARD K2

- A. HOTELS WITH BIG SHOWS AND NAME STARS
- B. HOTELS WITH BIG SHOWS, WITHOUT NAME STARS
- C. HOTELS WITHOUT SHOWS
- D. OTHER CASINOS

P. 466200

CARD K3

- A. CASINOS
- B. SLOT MACHINE PARLORS
- C. BARS
- D. STORES, GAS STATIONS
- E. RAILROAD STATION, AIRPORT, BUS STATION

P. 466200

CARD L

- 8 A LOT OF
- 7
- 6
- 5
- 4
- 3
- 2
- 1 NONE AT ALL

P. 466200

CARD M

- 1. DESCRIBES ME VERY WELL
- 2. DESCRIBES ME SOMEWHAT
- 3. DOESN'T DESCRIBE ME VERY WELL
- 4. DOESN'T DESCRIBE ME AT ALL

P. 466200

D-5

CARD N

1. STRONGLY AGREE
2. AGREE
3. DISAGREE
4. STRONGLY DISAGREE

P. 466200

D-6
Exhibit Cards

CARD O

I am concerned about getting hurt | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | I enjoy an element of physical danger

P. 466200

CARD P

Careful to avoid any behavior which might compromise my ethical standards | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Flexible about standards of behavior, even if there is some risk

P. 466200

D-7
Exhibit Cards

CARD R

CARD Q

X-1. Taking everything into consideration, how happy are you with your home life? Just tell me the letter of the statement that best describes how things are right now.

- A. EXTREMELY HAPPY
- B. VERY HAPPY
- C. HAPPY
- D. NOT VERY HAPPY
- E. NOT AT ALL HAPPY

P. 466200

X-3. How often do you disagree with your (husband/wife) about how much money to spend on various things--never, rarely, sometimes, often, or very often?

- A. NEVER
- B. RARELY
- C. SOMETIMES
- D. OFTEN
- E. VERY OFTEN

X-4. How well do you think your (husband/wife) understands you--your feelings, your likes and dislikes, and any problems you may have; do you think that (he/she) understands you very well, fairly well, not very well, or not well at all?

- A. VERY WELL
- B. FAIRLY WELL
- C. NOT VERY WELL
- D. NOT WELL AT ALL

P. 466200

CARD S

X-8. Would you say your children have more problems than most children have, about as many, or have fewer problems than most children?

- A. MORE PROBLEMS
- B. ABOUT AS MANY PROBLEMS
- C. FEWER PROBLEMS

P. 466200

CARD T

- A. A MILLION OR MORE
- B. 500,000 TO A MILLION
- C. 100,000 - 499,999
- D. A SUBURB OF A LARGE CITY
- E. 20,000 - 99,999
- F. 5,000 - 19,999
- G. LESS THAN 5,000
- H. RURAL AREA

P. 466200

Exhibit Cards

CARD U

THE LAST GRADE OF SCHOOL COMPLETED WAS:

- A. ATTENDED GRADE SCHOOL
- B. GRADUATED GRADE SCHOOL
- C. ATTENDED HIGH SCHOOL
- D. GRADUATED HIGH SCHOOL
- E. ATTENDED COLLEGE
- F. GRADUATED COLLEGE
- G. ATTENDED GRADUATE SCHOOL
- H. GRADUATED GRADUATE SCHOOL

P. 466200

CARD V

- A. UNDER \$1,000
- B. \$1,000 - 1,999
- C. \$2,000 - 3,999
- D. \$4,000 - 4,999
- E. \$5,000 - 7,499
- F. \$7,500 - 9,999
- G. \$10,000 - 12,499
- H. \$12,500 - 14,999
- I. \$15,000 - 19,999
- J. \$20,000 - 24,999
- K. \$25,000 - 29,999
- L. \$30,000 - 49,999
- M. \$50,000 - 74,999
- N. \$75,000 - 99,999
- P. \$100,000 - 199,999
- R. \$200,000 +

P. 466200

CARD W

- A. COMMERCIAL BANK
- B. SAVINGS & LOAN BANK
- C. RETAIL CREDIT, OR CREDIT CARDS
- D. SMALL LOAN COMPANY
- E. CREDIT UNION
- F. INSURANCE POLICY
- G. FAMILY
- H. FRIENDS
- I. OTHER PEOPLE

P. 466200

CARD X

- A. LESS THAN \$50
- B. \$50 to \$74
- C. \$75 to \$99
- D. \$100 to \$124
- E. \$125 to \$174
- F. \$175 to \$199
- G. \$200 to \$249
- H. \$250 to \$349
- I. \$350 to \$499
- J. \$500 to \$749
- K. \$750 to \$999
- L. \$1,000 OR MORE

P. 466200

D-9
Sort Cards

A

BETTING ON
HORSES AT
HORSE TRACKS

B

OFF TRACK
BETTING ON
HORSES

C

PLAYING
BINGO WHERE
YOU PAY TO
PLAY

D

BUYING
LOTTERY
TICKETS

E

PLAYING THE
NUMBERS,
BOLITAS, OR
POLICY GAME

F

PLAYING
SLOT
MACHINES

G

PLAYING GAMES
AT GAMBLING
CASINOS

H

BETTING ON
SPORTS CARDS
OR SHEETS

I

BETTING ON
SPORTS EVENTS
WITH A BOOKIE

J

BETTING ON
SPORTS EVENTS
WITH FRIENDS

K

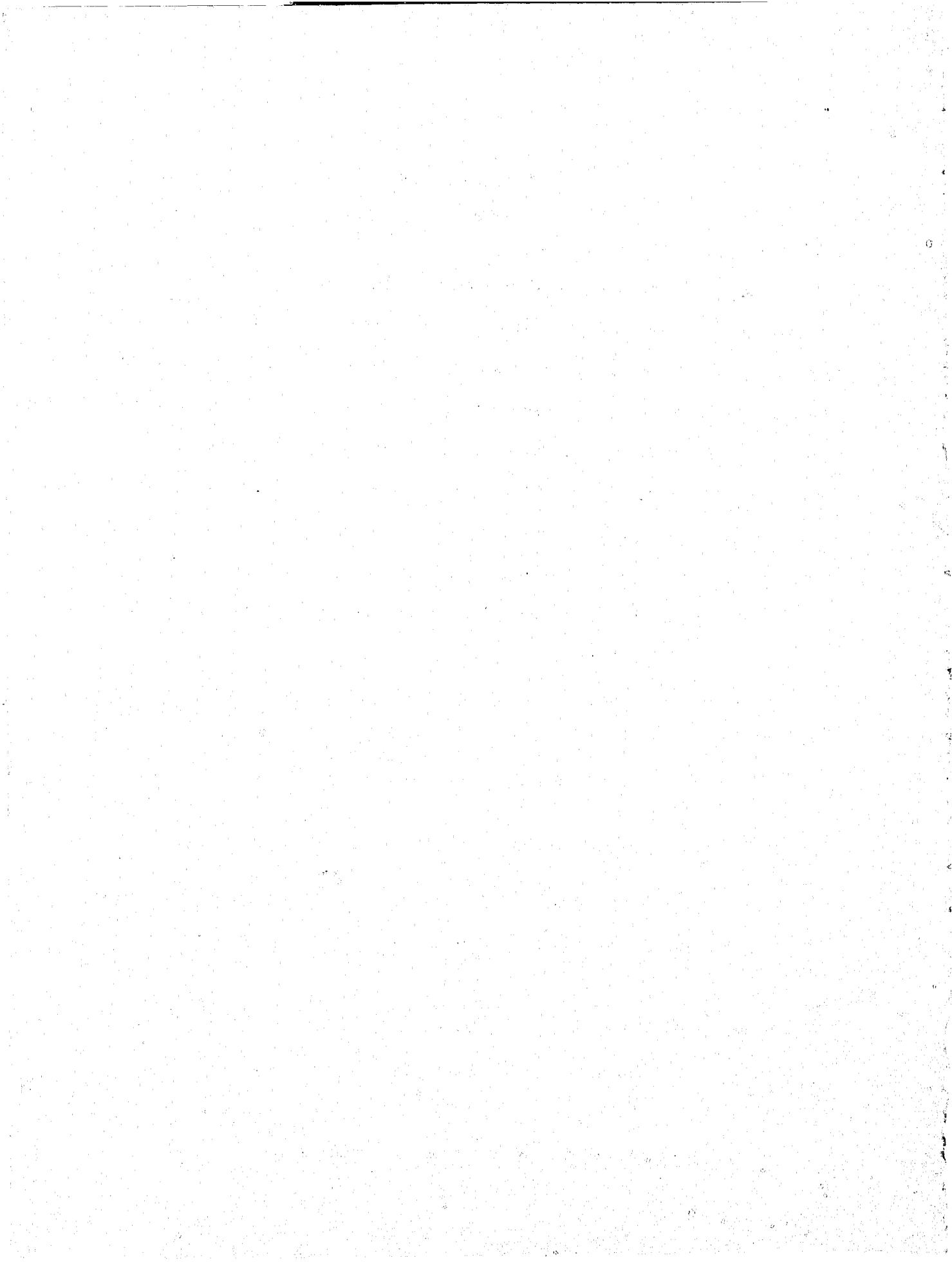
PLAYING CARDS
WITH FRIENDS
FOR MONEY

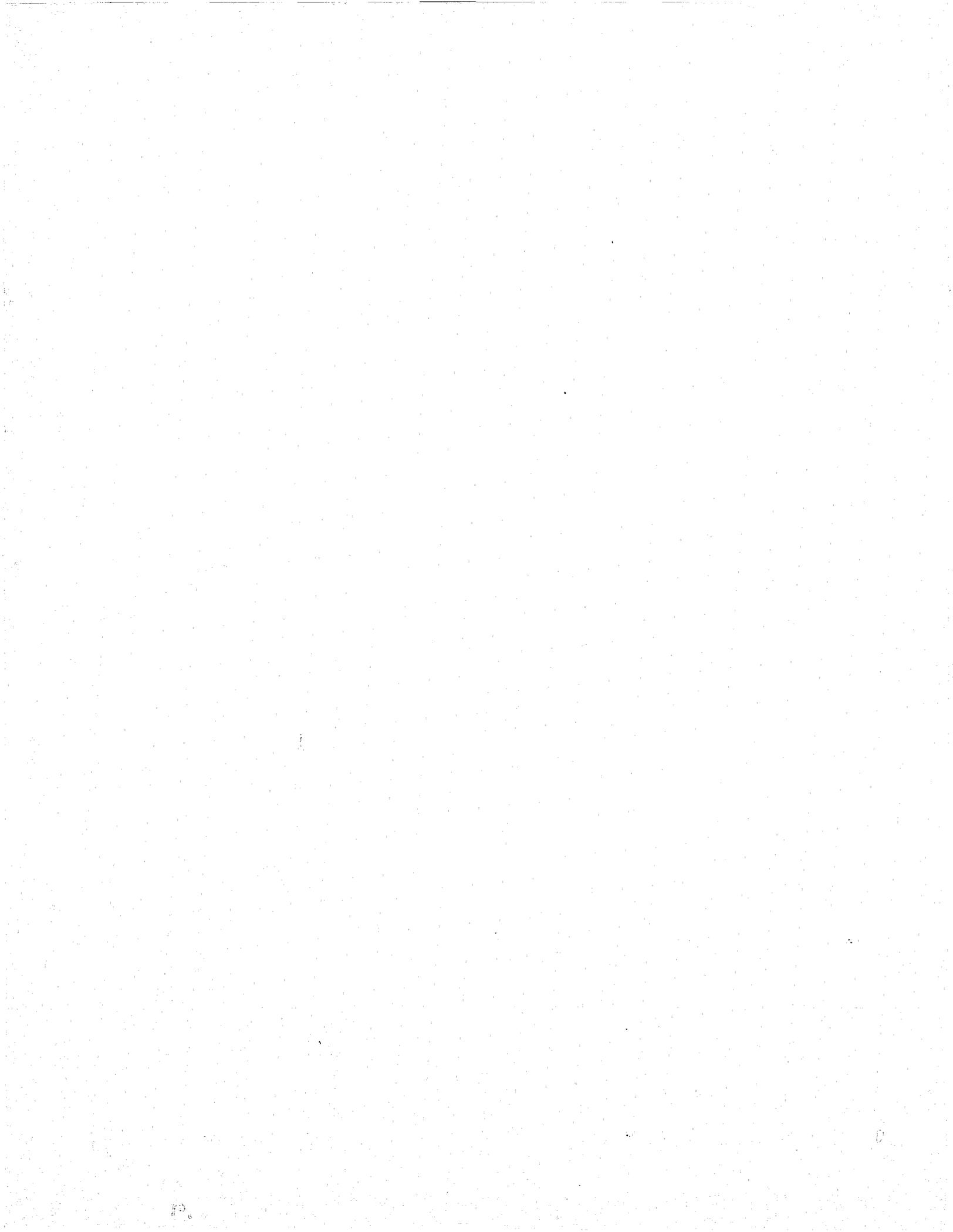
L

SHOOTING
DICE FOR
MONEY

M

BETTING ON
THE DOGS AT
DOG TRACKS





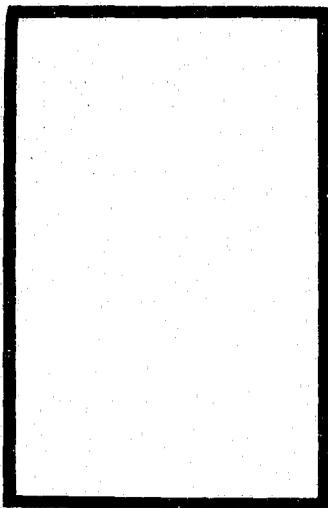
CONTINUED

6 OF 7

SORT BOARD 1

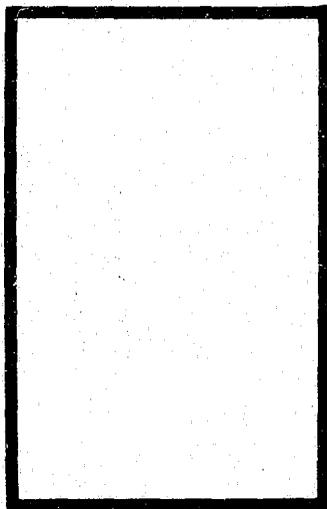
1

MOST PEOPLE



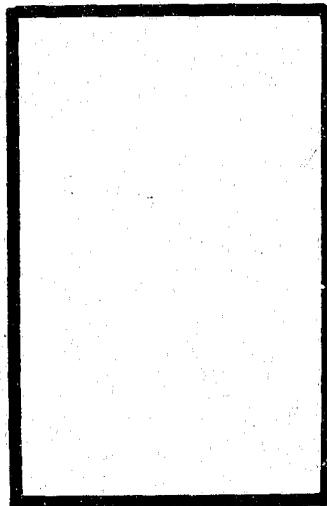
2

QUITE A LOT OF PEOPLE



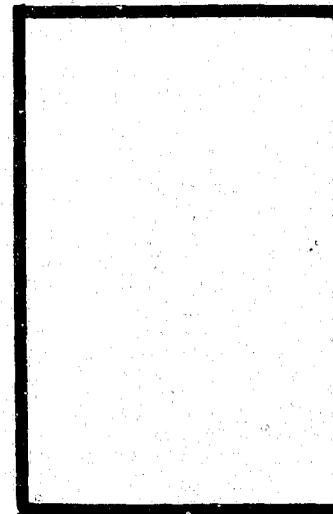
3

A FEW PEOPLE



4

PRACTICALLY NO ONE



D-10



SURVEY RESEARCH CENTER
INSTITUTE FOR SOCIAL RESEARCH
THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICHIGAN 48106

(Do not write in above space.)

J. Interviewer's Label

1. Primary Area: _____

2. Date: _____

3. Segment No. _____ 4. Line No. _____ 5. Cover Sheet No. _____

6. Selected Respondent is: Male, Age _____
 Female, Age _____

SCREENING QUESTIONNAIRE

X1. Have you lived in Nevada all your life?

1. YES
INTERVIEW

5. NO → GO TO X2

X2. How long ago did you move to Nevada?

_____ YEARS OR _____ MONTHS

LESS THAN 18 MONTHS → DO NOT INTERVIEW
 18 MONTHS OR MORE
↓

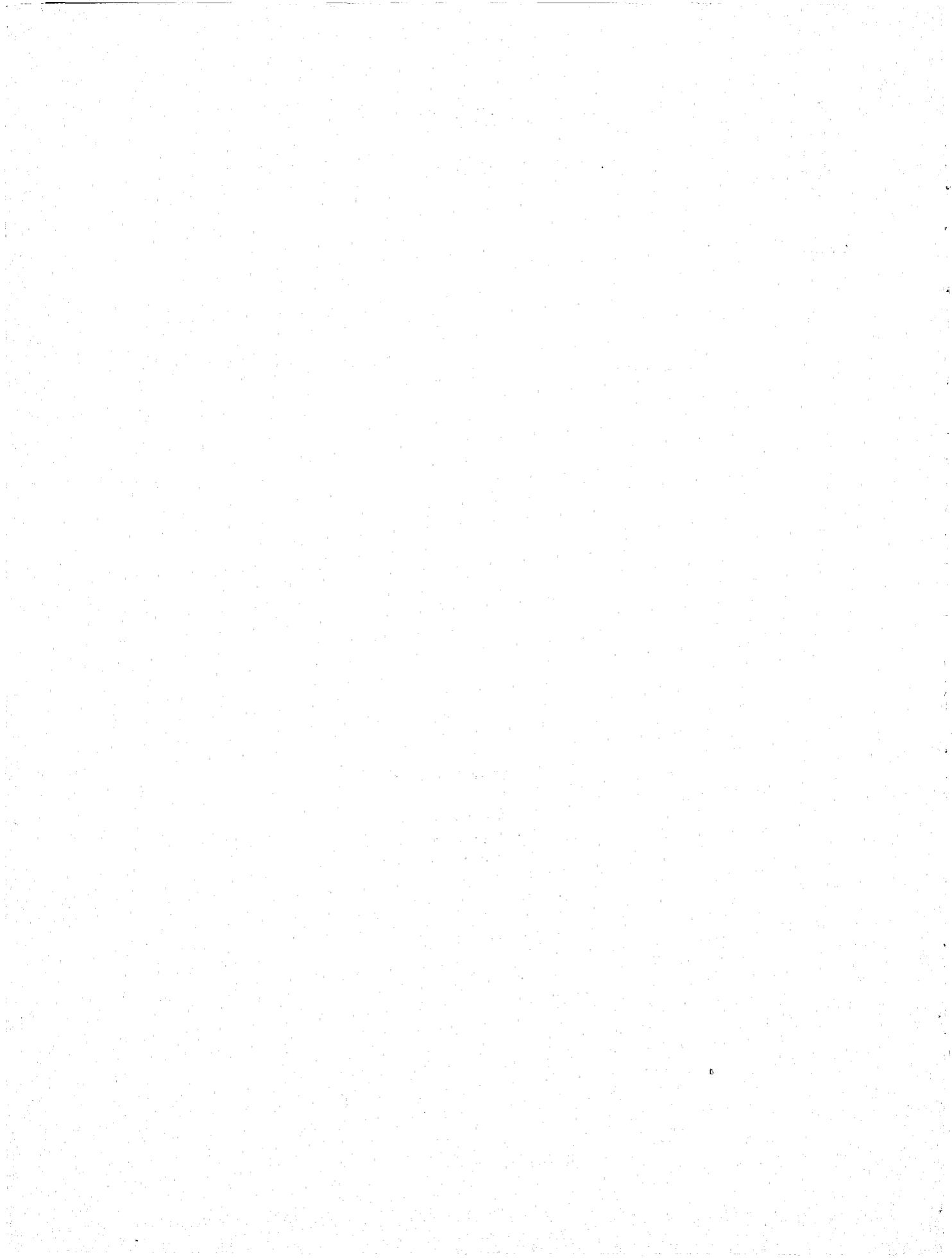
X3. Why did you move to Nevada? _____

X4. Would you have moved to Nevada if the same kinds of gambling facilities were available elsewhere in the U.S.? Would you say you definitely would have moved here anyway, you probably would have moved here anyway, you probably would not have moved here or definitely would not have moved here?

- | | | | |
|---|---|------------------|----------------------------|
| <input type="checkbox"/> 1. DEFINITELY <u>WOULD</u> HAVE MOVED HERE | } | INTERVIEW | <input type="checkbox"/> 1 |
| <input type="checkbox"/> 2. PROBABLY <u>WOULD</u> HAVE MOVED HERE | | | <input type="checkbox"/> 2 |
| <input type="checkbox"/> 3. PROBABLY <u>WOULD NOT</u> HAVE MOVED HERE | } | DO NOT INTERVIEW | <input type="checkbox"/> 3 |
| <input type="checkbox"/> 4. DEFINITELY <u>WOULD NOT</u> HAVE MOVED HERE | | | <input type="checkbox"/> 4 |

Table E
Demographic Comparisons of
Nevada Sample and National

	Nevada %	National %
<u>Sex</u>		
Male	46	46
Female	54	54
<u>Race</u>		
White	89	85
Black	5	9
Chicano	3	3
Other	3	3
<u>Age</u>		
18-24 years	16	14
25-44 years	45	43
45-64 years	28	31
65 or older	11	12
<u>Income</u>		
\$5,000	12	14
\$5,000-\$10,000	20	19
\$10,000-\$15,000	26	24
\$15,000+	42	43
<u>Education</u>		
Not high school graduate	27	32
High school graduate	34	31
Some college	27	21
College graduate	12	16
<u>Marital status</u>		
Married	72	75
Divorced, separated	12	7
Widowed	7	7
Never married	9	11





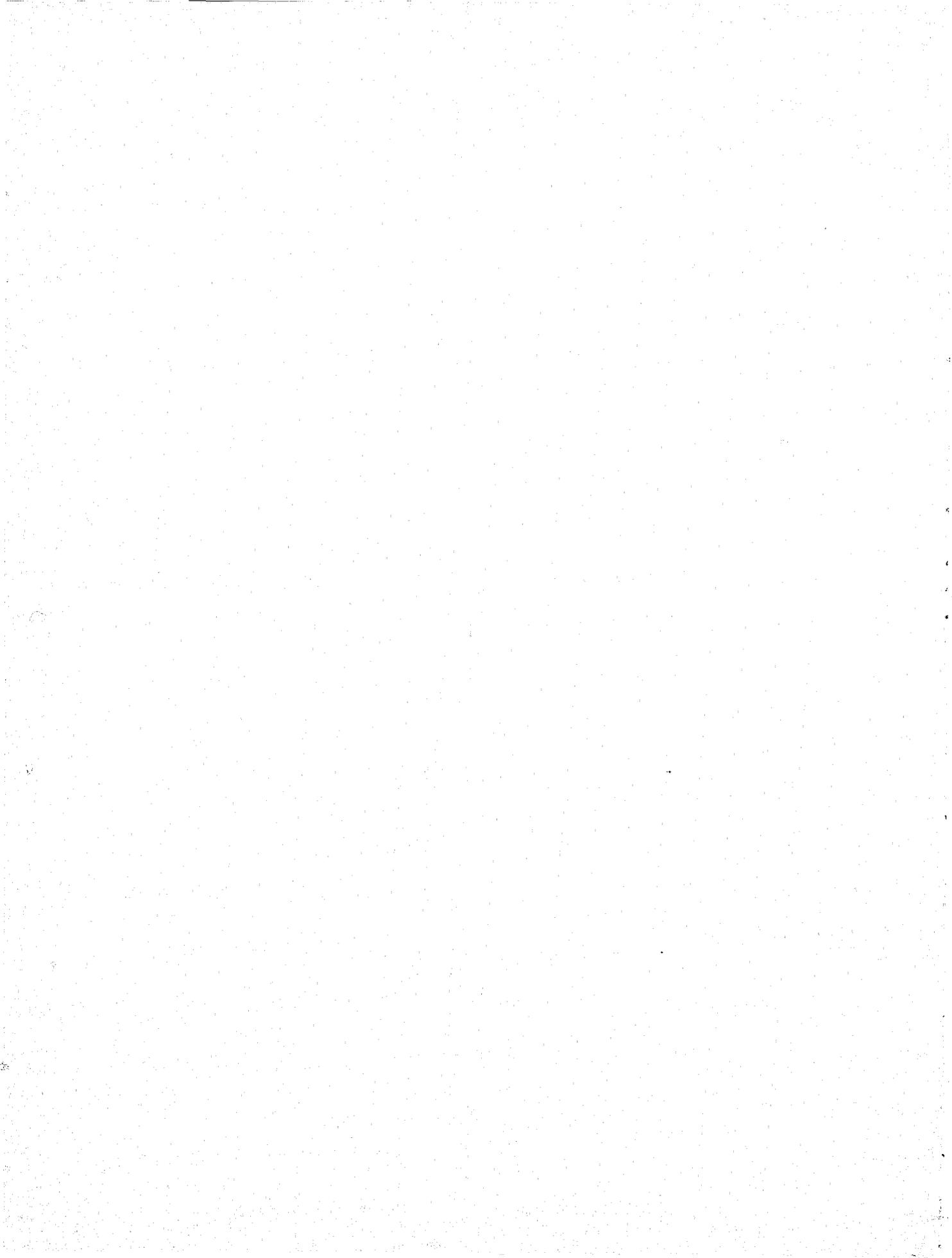
THE LIBRARY OF CONGRESS
Congressional Research Service

WASHINGTON, D.C. 20540

A REVIEW OF TWO STUDIES ON GAMBLING IN THE UNITED STATES

BY

Daniel Melnick
and
Royce Crocker
Analysts, Government Division
November 16, 1976



A REVIEW OF TWO STUDIES ON GAMBLING IN THE UNITED STATES

This report constitutes the CRS review of the findings of the study of gambling conducted by the Survey Research Center (SRC) of the University of Michigan for the Commission on the Review of the National Policy Towards Gambling. This review was prepared at the request of Senator Robert Taft, Jr., a member of the Commission. He asked CRS to review the findings of the SRC survey with the following objectives:¹

1. An evaluation of the credibility of the survey estimate of total illegal gambling, taking into account the other estimates that are available. Was the methodology of the survey appropriate to developing this estimate? Are other estimates, such as that of the Department of Justice, as soundly based? How might the differences between the survey result and the others be explained?
2. To what extent does uncertainty about the survey's results as to the total volume of illegal gambling taint other results as given in the Final Report of the University of Michigan to the Commission?

Senator Taft's request was prompted by the wide divergence in estimates of the dollar value of illegal gambling between the SRC survey (which showed that value at \$5 billion and the Department of Justice analysis (which showed that value at \$29 billion). Because the findings of the SRC survey constitute the result of the major research effort of the Commission, there was concern that the SRC findings in other areas might be challenged. CRS analysis concentrates on two questions: (1) The reconciliation of the conflicting estimates, and (2) evaluation of the other SRC findings.

Summary of Conclusions

Our review finds:

1. All estimates of the amount of illegal gambling are problematical because of the illicit nature of the activity being studied. Survey methodology relies upon the willingness of individual respondents to admit they gamble illegally. Because

¹See Exhibit A for a copy of Senator Taft's letter.

apprehension data [such as the apprehension data used by the Department of Justice] are limited to apprehended cases, no good way exists to project validly from such cases to those which were not apprehended.

2. The SRC estimates of the dollar value of legal gambling appear to match known official records of this gambling.

3. Adequate tests for the accuracy of the SRC measures of the dollar value of illegal gambling were not conducted during the course of its study. Although it is not possible to estimate the effect of the measurement errors introduced, several possible sources of error can be identified. Most important among these is the likelihood that some illegal gamblers in the designated sample did not admit that they gamble.

4. Further, the SRC sample was not designed to produce good estimates of the gambling habits of small segments of the population. Consequently, if a large proportion of the dollar value of bets is accounted for by a small percent of the American population (for example, a group as large as 500,000), there may be important errors in the SRC estimates. This would include errors in the total dollar value of illegal bets as well as the characteristics and habits of bettors. Because the SRC study does not provide evidence of the existence or absence of a group of high rollers who account for a large proportion of the illegal betting done, it is not possible to evaluate the importance of this problem.

5. The SRC findings are most valuable when they refer to public attitudes toward gambling. Many of the likely problems relating to betting habits do not apply to this part of the data.

6. Estimates of the behavior of bettors who practice a specific type of betting (such as betting with a bookmaker on the horses) appear to be least useful because of the small number of such bettors identified by the survey.

7. SRC did not utilize the most exact procedures to calculate sampling error. While this might not ordinarily be a major problem, in view of the controversy regarding the effect of sampling on the results, a recalculation of the sampling error by a sampling statistician may help to lay the controversy to rest.

8. The Justice Department estimates are most valid when applied to the amount of detection of illegal gambling. Their estimation of the amount of illegal gambling which went undetected rests on several unsubstantiated assumptions. Consequently, it is not possible to estimate the likely amount of under- or overestimation produced by their method. Because the range of error cannot be specified, the usefulness of their conclusions is in doubt.

Review Procedures Followed

This CRS review extended over the last 3 months. We analyzed the results of the survey conducted for the Gambling Commission and compared them with the Department of Justice estimates. Our analysis has benefited from consultations with members of the Gambling Commission staff, researchers at the University of Michigan, and analysts in the Department of Justice. The Department of Justice has provided us with a detailed explanation of the derivation of their estimate.² At the request of the Fund for the City of New York, Oliver Quayle and Co., provided us with a copy of the questionnaire used in their study of numbers and horserace gambling. The Department of Justice estimates are partly based on this survey. The Gambling Commission has provided us with a complete copy of all relevant survey documents (including the coding book, interview schedule, and interviewer instructions), numerous computer printouts, and a complete copy of the Survey Research Center's report. We have also obtained and analyzed the OMB clearance officer's file relevant to the SRC study.

The Department of Justice Estimate

The Department of Justice (Organized Crime and Racketeering Section, Criminal Division) estimates that illegal gambling activity in the United States amounts to approximately \$29 billion per year. This estimate is based on calculations performed by Alfred King in November 1973.

Mr. King began his calculations with the number of horserace bets discovered by the Department's strike forces in New York City during 1971 and 1972. He next calculated the dollar value of illegal horserace bets in New York City during the first 6 months of 1973 by using the Off-Track Betting (OTB) figures for that

² Presented as Exhibit B below.

period and an estimate that 37.8 percent of all horserace bets not placed at the track were illegal. This latter estimate is drawn from a study of sports betting done by Oliver Quayle and Company for the Fund for the City of New York. That study was a survey of 2,500 adults in New York City. It was conducted in June 1972.³

Using the Quayle estimate that 37.8 percent of all horse bets not placed at the track were placed with bookmakers in 1972, Mr. King calculated the dollar value of bookmaker bets on horses in New York City in the first 6 months of 1973 based on the dollar value of OTB bets.

Having figured the dollar amount of the money with bookmakers on horses in this fashion, Mr. King calculated the weekly amount from this by averaging. He used this weekly average in the first 6 months of 1973 and compared it with the weekly average of arrests for 1971 and 1972 by the Federal Government's strike forces in New York City. To quote Richard L. Thornburgh, Assistant Attorney General, Criminal Division:

On the basis of this, a factor of expansion was arrived at which was used to project not only horse bets in New York but all bets throughout the country.

Under this procedure, the difference between the average weekly bets in the first 6 months of 1973 (as calculated

³ An examination of the report of that study shows that the estimate Quayle presented was 25 percent of horserace bets were placed with bookmakers. This constitutes 37.8 percent of the bets placed away from the track. The remainder were placed at the track.

above) and the average weekly apprehensions by the strike force in 1971 and 1972 in New York City is taken as an estimate of the proportion of all illegal betting apprehended by the strike forces. Once this factor is derived, it is used to calculate the value of all illegal bets on the basis of those bets uncovered by the strike forces nationwide in all kinds of betting.

The SRC Study

The SRC survey was conducted during the summer of 1975 following an extensive effort to develop measures of gambling participation and attitudes. The primary purpose of the survey was to produce information about: (1) The attitudes of the public toward gambling and its legalization, (2) the proportion of the population which participates in gambling activity, (3) the possible impact of legalization, and (4) a set of persons known as compulsive gamblers.

The preparation of the research instrument involved extensive pretesting and focused / group interviews. The survey team included a psychologist and several economists. The sample was drawn to the specifications of the principal investigator by the SRC's sampling section.

The sample SRC used was designed to produce estimates for the continental United States. Because it was believed that men gamble at higher rates than women, inner city residents at higher rates than other persons, and residents of SMSA's at higher rates than non-SMSA residents, a complicated weighting scheme was used to overrepresent these groups in the sample. Proper corrections for this sampling scheme were combined with corrections for differential response rates to produce population estimates. This procedure appears to provide more useful data than could have been produced with the same size simple random sample. Because it insures that more gamblers are found in the sample, it greatly increases our confidence in the results. Even with this method, the number of persons discovered who gamble on any one particular game remains small. Further, the correct calculation of the sampling error is complicated by the sampling scheme.

Discussion

Our analysis of these estimates has resulted in the following conclusions:

1. All estimates of the amount of illegal gambling are problematical; because of the illicit nature of the activity being studied, survey methodology relies upon the willingness of individual respondents to admit they gamble illegally. Because apprehension data is limited to apprehended cases, no good way exists to project validly from such cases to those which are not apprehended.

The dollar value of illegal gambling is extremely difficult to estimate because participants in the activity must be assumed to be reluctant to reveal the true nature of their participation. Survey researchers face several important methodological problems in attempting such estimation. Because the population of illegal gamblers is not evenly distributed across the country, special samples are needed. Extreme measurement problems also exist.

These include:

- Identification of individuals who engage in illegal wagering. When asked, illegal bettors may be inhibited from admitting their participation for fear of prosecution. A social stigma may also be perceived as attached to admitting illegal gambling activity.
- Measurement of the amount of wagering [dollar value] within a specified period of time. Respondents may not be able to recall the amount of money wagered if the question is asked directly. Estimates may contain a considerable amount of error due to memory lapses or other factors relating to the way the questions are asked.

The use of apprehension data is also problematical. Apprehension data reflect the efforts of law enforcement agencies in arresting bookmakers. If the results of these efforts are

unevenly distributed across the nation or among different forms of gambling, any attempt to use them to establish proportionate incidence is questionable. Apprehension data do provide the most direct source of information concerning the results of police work, but that information is generally not projectable to cases which were not apprehended. The combined use of survey and apprehension data might provide for more stable estimates if the problems which are present with both these sources of data could be corrected and if the appropriate survey and apprehension data were used. Neither the SRC nor the Justice Department estimates appear to have solved the problems raised in the foregoing paragraphs. A review of their work leads to the conclusion that no good estimates are currently available.

2. The SRC estimates of the dollar value of legal gambling appear to match known official records of this gambling.

The validity of survey results may be established by comparing key aspects of those results to known data. The SRC compared their findings about the amount of money wagered legally to official records of this kind of gambling. The closeness of the SRC survey data to these official records strongly suggests that the method used by SRC to estimate the value of legal gambling produced correct results.

This fact implies that the measures of the dollar value of wagering used by SRC tend to produce good estimates. SRC researchers argue that this implies that the measures of illegal gambling are also good because the same measurement techniques were used. Leaving aside the question of the estimation of the proportion of the population which engages in illegal gambling, it should be recognized that the ability of the measurement instruments to measure correctly the amount of dollars wagered by an individual who admits gambling (whether legal or illegal) is strongly supported by these results. Nevertheless, this method of validation is not a direct one, and still leaves open the possibility that the measurement of the dollar value of illegal gambling may differ in important ways from the measurement of legal gambling.

3. Adequate tests for the accuracy of the SRC measures of the dollar values of illegal gambling were not conducted during the course of its study. Although it is not possible to estimate the effect of the measurement errors introduced, several

possible sources of error can be identified. Most important among these is the likelihood that some illegal gamblers in the designated sample did not admit that they gamble.

Because of the problems associated with the measurement of the proportion of persons who engage in illegal gambling and the amount of money they wager, studies of the validity of the measurement techniques used would have greatly helped those who wish to assess the validity of the findings. Unfortunately, outside of two pretests conducted with the aim of testing the acceptability of the interview schedule, no studies of the validity of the measurement techniques used were conducted.

Special validity studies of the measurement of the proportion of persons who engage in illegal gambling (such as testing the survey procedures on known gamblers) would have been in order to determine the response accuracy of the estimate of number of times bet and average dollar value of bet. If we assume for a moment that the proportion of persons betting illegally is not an issue, these questions remain:

- Did respondents who admitted they bet illegally correctly estimate the number of times they bet in 1974?
- Did they correctly estimate the amount they usually bet?

The authors went to a considerable amount of trouble to obtain good estimates. The dollar amount bet was not based upon a single item, but was the result of several questions. Further, several methods of ascertaining the information were contained in the questionnaire for purposes of cross-validation. A comparison of dollar values between the survey results and known statistics of legal betting suggests that the method used to elicit information about the dollar value of legal bets has a high degree of validity. The same method was used to gain information about the dollar value of illegal bets. Furthermore, the authors report a high degree of consistency between different estimates of the dollar value of illegal betting activity. Consequently, it would appear that--for persons willing to admit to illegal gambling--the survey instrument accurately estimates the amount of money bet per year.

Unfortunately, this conclusion is based on an argument from analogy because no direct validation of the measurement procedure was performed.

It is likely that some respondents who engage in illegal gambling may have been excluded from the tally of such persons due to the use of a single "skip" question by SRC. This question asked respondents whether they had ever played games for money or bet an amount on an event. SRC did not perform validation surveys to determine the number of people who did not answer this question correctly. In the absence of such studies it is difficult to assess the impact of this procedure on the results reported.

An examination of the OMB clearance officer's file reveals that SRC originally proposed to interview known gamblers and determine if their responses indicated that they gambled. Unfortunately, the Gambling Commission decided to cancel this procedure due to its inability to provide SRC with a list of known bettors. SRC also proposed a before-and-after study to estimate the impact of legalization on Massachusetts. This study might have provided a valid basis upon which to estimate the effect of legalization because the same individuals could have been asked about their betting behavior prior to and after the change in the law. This is a procedure which SRC has used successfully to address a number of other problems, such as the impact of social and psychological factors on voting behavior.

In the absence of this kind of information, the SRC study has had to rely on perceptions of probable behavior. A major difficulty with this type of data is that these perceptions are only one of a number of factors which may influence the decision to participate in a legalized system; for example, the extent to which legalization was accompanied by advertising, or whether vigorous enforcement of laws forbidding illegal gambling might have an impact on the actual number of persons who would bet legally and illegally after legalization. Consequently, data about the perception of probable behavior is not completely predictive of actual behavior after legalization.

4. The SRC sample was not designed to produce good estimates of the gambling habits of small segments of the population. Consequently, if a large proportion of the dollar value of bets is accounted for by a small percent of the American population (for

example, a group as large as 500,000), there may be important errors in the SRC estimates. This would include errors in the total dollar value of illegal bets as well as the characteristics and habits of bettors. Because the SRC study does not provide evidence of the existence or absence of a group of high rollers who account for a large proportion of the illegal betting done, it is not possible to evaluate the importance of this problem.

The primary aim of the SRC survey was not to develop an estimate of the dollar value of illegal gambling in the United States but rather to measure attitudes toward gambling and rates of participation in gambling. Because a large proportion of participation in gambling is legal, a methodology focused on the measurement of illegal gambling was not necessary for the purpose.

The sample design used concentrated the resources available on those areas where more gambling was assumed to be present. This strategy compensated for the unequal distribution of gamblers across the country, but it did not account for the possibility that most illegal gambling is concentrated among a relatively small group of people. If there were as many as 500,000 people in the Nation who bet an average of \$50,000 annually, the sample used by the SRC has a very small chance of producing good estimates of their gambling activity.

For example, assume that there are 500,000 "high rollers" (i.e., their average yearly bet is \$50,000) and they are distributed across the country approximately as the Survey Research Center's sampling and weighting procedures would imply (i.e., gamblers are twice as likely to fall into the SMSA's as the non-SMSA's; twice as many men as women gamble and gamblers are 2-1/2 times more likely to fall into 14 center city areas than into the other areas sampled).

If we calculate the possible number of "high rollers" which the SRC's sample is likely to find for each subsample portion (i.e., the SMSA portion, the non-SMSA portion, and the 14 central cities portion), we find that in the SMSA sample portion, the SRC sample should find 1.76 (+ 2.72)* "high rollers," in the non-SMSA sample portion, the SRC sample should find 1.37 (+ 2.28)* "high rollers," and in the 14 central city portion, the SRC sample should find 12.75 (+ 6.96) "high rollers."

*Sampling error, number of "high rollers."

Consequently, if there were 500,000 "high rollers" who gambled illegally and even if these gamblers were distributed in a way which takes the most favorable advantage of the sample design, there is a very good likelihood that this group would have been missed in the sample. If this were the case [and if we were to accept the SRC estimates as reflecting the betting behavior of the rest of the population], the true amount of illegal betting might exceed \$30 billion a year.

Further, in spite of the extensive efforts of the Survey Research Center--including up to 8 attempts to reach the designated respondent--only 75 percent of the designated respondents were interviewed; in the central cities the interview rate was 43 percent. While these weighted completion percentages compare favorably with known rates of completion in other surveys, they are a particular problem in the present case. Where the activity being studied is not likely to be highly concentrated among small groups in the population, the moderate completion rates reported in this study may not prove a great problem. But, if (for any reason) the group of high rollers were included in those with a very low rate of completion, the likelihood of finding even a single representative of this group would have been further reduced.

However, we must caution the reader of this report that the above argument is limited in application. The SRC study does not present evidence as to the existence or absence of such a group of high rollers. There is no known evidence that such a group does exist. Consequently, this matter must remain an open issue unanswered by the SRC study or any other study known to us.

5. The SRC findings are most valuable when they refer to public attitudes toward gambling. Many of the likely problems relating to betting habits do not apply to this part of the data.

Questions included on the SRC survey instrument which address the issue of the legalization of gambling are not limited to persons identified as gamblers. In fact, these items are independent of the estimates of the dollar value of legal or illegal gambling. As such, any errors in these estimates do not have an effect on the validity of the SRC findings with regard to the public acceptance of legal gambling. Furthermore, the problems relating to using a sampling procedure to make estimates

of the dollar value of illegal gambling do not apply to the attitudinal items. Consequently, the procedures used by the SRC appear to be the most appropriate to make valid estimates of opinion concerning gambling.

6. Estimates of the behavior of bettors who practice a specific type of betting (such as betting with a bookmaker on the horses) appear to be the least useful because of the small number of such bettors identified by the survey.

Estimates of the characteristics and behavior of persons who bet on specific games are most open to question due to the small number of persons identified as having engaged in individual games. Even though these persons may "represent" large groups of people in the population at large, analyses based on their income or social standing may not be adequately supported by the data SRC presents.

For example, a major finding of the SRC study relates to the regressivity of legalized gambling as a source of income for States and localities. The SRC survey data show that most forms of gambling are more regressive than sales taxes. The logic here is that the survey data show that the "take" or profits from gambling (except casino gambling) are disproportionately drawn from low income people.

A major problem with this finding results from the uncertainty about the survey's inclusion of all bettors in its calculations. If more low income bettors were not counted as betting, the data has underestimated the regressivity of gambling. If, conversely, a large proportion of the money gambled is accounted for by a few high income bettors, whose betting was not adequately estimated by the survey, the data has overestimated gambling's regressivity. In fact, the SRC survey has not settled this issue.

Error in estimating the true shape of the Lorenz curve for any single game from the SRC data is likely to be greater than errors in the total value of all gambling because each Lorenz curve is based on a smaller number of cases.

7. SRC did not utilize the most exact procedures to calculate sampling error. While this might not ordinarily be a major problem, in view of the controversy regarding the effect of sampling on the results, a recalculation of the sampling error by a sampling statistician may help to lay the controversy to rest.

The sample used in the SRC study was based on a complicated set of assumptions about the distribution of betting behavior among the general population. Men were sampled at twice the rate of women, people living in urban areas at higher rates than those living in rural areas, and people living in 14 central cities at still higher rates. Furthermore, the sample was clustered, i.e., it departed from simple random sampling in that clusters of households were selected and it was stratified.

The sampling errors presented in the report submitted to the Commission did not take the weighting, clustering, or stratification factors into account. Rather the researchers assumed that these factors canceled out producing errors which were the same as the errors for a simple random sample. While this assumption is often correct, in the current case, because of the complicated nature of the procedures used and the importance of accurate estimates of error, special correction factors for stratification, weighting, and clustering could have been used to produce more precise estimates. This would appear to be particularly important for estimates relating to groups smaller than the entire sample. Considering the moderate expense involved in calculating such errors, it would appear wise for the Commission or some other body to calculate them from the data which are available.

8. The Justice Department estimates are most valid when applied to the amount of detection of illegal gambling. Their estimation of the amount of illegal gambling which went undetected rests on several unsubstantiated assumptions. Consequently, it is not possible to estimate the likely amount of under- or over-estimation produced by their method. Because the range of error cannot be specified, the usefulness of their conclusions is in doubt.

The Justice Department estimates are based on the following assumptions:

- The rate of arrests for illegal operations in New York City is the same as the arrest rate for the rest of the country.
- The rate of arrest of horserace betting is the same as the rate of arrest for all other kinds of illegal betting.

- The survey conducted by Oliver Quayle adequately measured the amount of betting on horses with bookies.

Quayle's study is limited in that:

- Only respondents who bet on baseball, basketball, or football were asked if they bet on horses.
- Quayle used a quota sample. In this type of sample, interviewers are given starting points and told to interview persons with certain characteristics. It is possible that those persons agreeing to be interviewed did not have the same betting behavior as those who did not agree to be interviewed. Because of the method of sampling used, it is difficult to compute rates of completion for this survey which are comparable to the completion rates calculated by the SRC.

A further problem with the Justice Department calculation is that it uses data from one period (June 1972) to calculate information for a different period (the first 6 months of 1973). In fact, the Quayle study showed that there was a falling-off in the use of bookmakers when OTB started to operate. This suggests the possibility that continued OTB operations increased its percentage of the horse bet business. In any case, Mr. King has not shown that the percentage of bets placed with bookmakers remained stable from June 1972 (when the survey was done) to the first 6 months of 1973 (the period from which he used OTB statistics).

The Department of Justice estimate is based on a projection from New York City data relating one kind of gambling to national data. While using proportions tends to mitigate this problem somewhat, the Justice figures are nevertheless based on the assumption that the ratio between apprehensions and violations is constant. If arrests in New York City were higher, the national estimate would be low. If New York City arrests were a smaller percentage than nationally, the Justice estimates would be too high. There is no way of calibrating for this effect. Consequently, the Justice figures are of limited value. The amount of dollars represented by apprehensions would be of value

in establishing the minimum amount of gambling which occurs. Unfortunately nationwide tallies of the value of bets placed with apprehended bookies are not maintained.

In sum, Justice Department analysis utilizes survey results in one city, relating to one type of betting, and apprehension data pertaining to one kind of police activity to project estimates of all kinds of betting for the Nation as a whole. While it is difficult to challenge this analysis in the absence of more complete information, the Justice Department analysts have neither substantiated their projections nor collected the national apprehension data which might have provided a minimum estimate of the amount of illegal gambling which occurs.

HARRISON A. WILLIAMS, JR., N.J., CHAIRMAN
JENNINGS RANDOLPH, W. VA.
CLAIBORNE PELL, R.I.
EDWARD M. KENNEDY, MASS.
GAYLORD NELSON, WIS.
WALTER F. MONDALE, MINN.
THOMAS F. EAGLETON, MO.
ALAN CRANSTON, CALIF.
WILLIAM D. HATHAWAY, MAINE
JOHN A. DURKIN, N.H.

JACOB K. JAVITS, N.Y.
RICHARD S. SCHWEIKER, PA.
ROBERT TAFT, JR., OHIO
J. GLENN BEALL, JR., MD.
ROBERT T. STAFFORD, VT.
PAUL LAXALT, NEV.

United States Senate

COMMITTEE ON
LABOR AND PUBLIC WELFARE
WASHINGTON, D.C. 20510

DONALD ELISBURG, GENERAL COUNSEL
MARJORIE M. WHITTAKER, CHIEF CLERK

August 5, 1976

Mr. Frederick H. Pauls, Acting Chief
Government Division
Congressional Research Service
Library of Congress
Washington, D.C. 20540

Dear Mr. Pauls:

The Commission on the Review of the National Policy Toward Gambling, of which I am a member, recently received a research study from the University of Michigan's Survey Research Center. This study, based on a survey of individuals in the United States, included as one of its findings an estimate of the total volume of illegal gambling in 1974.

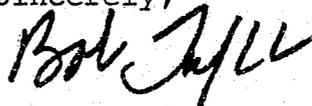
The survey estimate, at \$5.1 billion, is considerably lower than that produced by the Department of Justice and caused a great deal of controversy at a meeting held by the Commission to discuss the study. This figure is of considerable interest to the Commission's work and is important to me in forming a judgement as to the quality of the University of Michigan study. In light of the survey expertise of your division, I request that the Congressional Research Service undertake two tasks:

1. An evaluation of the credibility of the survey estimate of total illegal gambling, taking into account the other estimates that are available. Was the methodology of the survey appropriate to developing this estimate? Are other estimates, such as that of the Department of Justice, as soundly based? How might the differences between the survey result and the others be explained?
2. To what extent does uncertainty about the survey's results as to the total volume of illegal gambling taint other results as given in the Final Report of the University of Michigan to the Commission?

Mr. Pauls
Page Two

To enable you to complete the tasks, I am enclosing a copy of the University of Michigan Report, together with documents concerning other estimates, of the volume of illegal gambling. I would very much appreciate receiving your report no later than the end of September, 1976, if at all possible.

Sincerely,



Robert Taft, Jr.
United States Senator

Enclosures



UNITED STATES DEPARTMENT OF JUSTICE

WASHINGTON, D.C. 20530

August 18, 1976

Address Reply to the
Division Indicated
and Refer to Initials and Number

WSL:ANK:mew
64-012

Mr. Dan Melnick
Government Division
Congressional Research Service
Library of Congress
Washington, D. C.

Dear Mr. Melnick:

Pursuant to your telephonic request of August 12, 1976, please be advised that Mr. Alfred N. King of this Section utilized the following method in arriving at the figures for his gambling estimate of November, 1973:

He extracted the horse race bets discovered in the New York City area during enforcement activity during 1971 and 1972. He then attempted to find a reasonably unbiased, or conservatively biased, figure of total illegal horse race wagers placed in New York City so as to compare the part found with the part present.

To do this, he decided upon using the proportion of legal to illegal horse race wagers published in a survey of the Oliver Quale organization conducted for the Fund for the City of New York, which showed illegal books getting 37.8% of the market. This method, he believed, was open to question, since our experience had indicated that habitual bettors tend to understate the amount wagered or be unaware of that figure, keeping track of only wins or losses. However, since the errors were on the low side, he believed they had sufficient conservative bias to allow their use at arriving at a conservative figure.

This percentage was then worked against the total OTB handle for the first 6 months of 1973 as shown in the NLW Statistical Report of State Lotteries and Off-Track Betting to arrive at a figure for all illegal horse race wagering in New York during that period. This was then reduced to a weekly figure for direct comparison to the horse race wagering interrupted during the prior two years by Federal wagering enforcement efforts. On the basis of this, a factor of expansion was arrived at which was used to project not only horse bets in New York but all bets throughout the country.

This, of course, assumes that the enforcement effort was pursued equally across the country and equally as to all varieties of illegal wagers. We know of no way to either prove or disprove this, but we do know that all areas were working such cases to capacity during the 1971-1972 period. The extent to which their capacities differed should constitute a small unknown factor.

Finally, he allowed for areas in which we had pursued no enforcement activity in either 1971 and 1972 by computing a per-capita wager for the region involved based upon the projections previously spoken of and multiplying this by the populations for those missed areas as shown in the statistical abstract and published in the FBI's uniform crime statistics.

It should be emphasized that the projection for each area is based upon the expansion factor applied to the wagers discovered by enforcement in that area. Only the expansion factor, taken from the New York figures, was used nationwide.

Of course, the above assumes there was no illegal gambling in rural areas, an obvious error. But this was accepted since there were no figures which could give us such an estimate, and the lack of rural gambling was considered a small error backing up the conservative bias of the estimate.

Mr. King is of the opinion that we do not have a sufficient sample in any one city, except New York, to draw any conclusions as to wagering in those cities. He does believe we have sufficient experience in the regions mentioned to draw such conclusions except in the Southwest. He further states that any time the figures approach zero, we are probably in error. For instance, we have found numbers wagering in the Far West since the study was made.

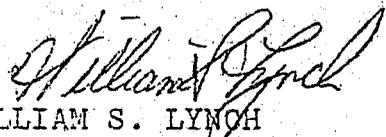
Mr. King believes that, discarding any controversy concerning the accuracy of the final projections, the percentage breakdowns of the amount divided between horse, sports and numbers wagering is arrived at from actual experience, therefore they should coincide with the survey of the Gambling Commission if that latter work is accurate. He notes they do not. The researchers from the Commission were at one point going to get together with Mr. King to talk out and explore the differences between their two estimates. To date, however, no such meeting has taken place.

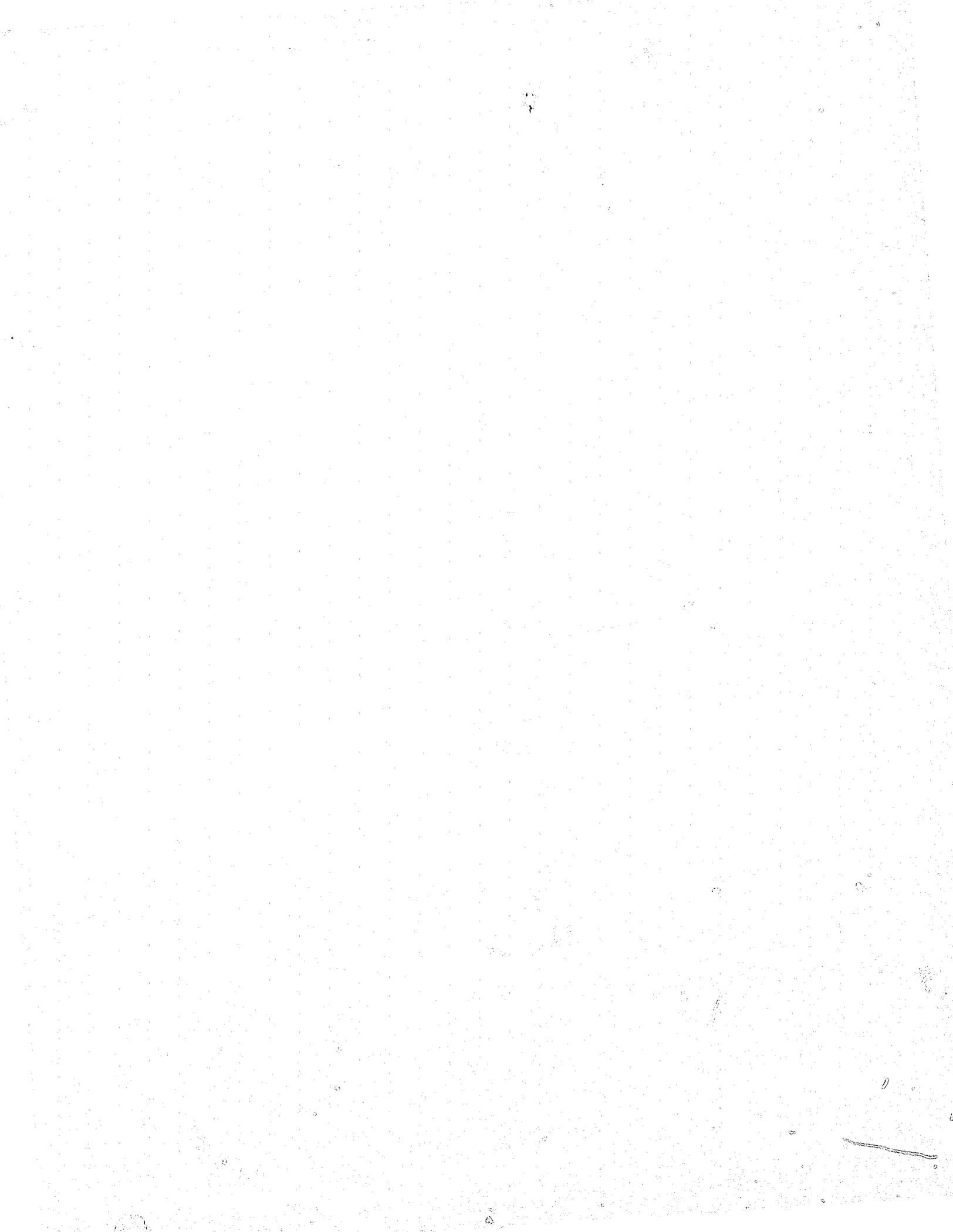
If you have any more questions, please call Mr. King.

Sincerely,

RICHARD L. THORNBURGH
Assistant Attorney General
Criminal Division

By:


WILLIAM S. LYNCH
Chief, Organized Crime and
Racketeering Section
Criminal Division



END