

DIFFERENTIAL INDEPENDENT RECREATIONAL
EXPERIENCE OF FELONS AND NON-FELONS

Kurt Spencer Peterson

APPROVED

Billy W. Bramlett, Chairman

Glen Kercher

John Cocoros

Bascom Barry Hayes
Dean of the Graduate School

DIFFERENTIAL INDEPENDENT RECREATIONAL
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Kurt S. ^{Spencer} Peterson
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ABSTRACT

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Purpose

The purpose of this study was to determine the extent to which 113 specific items, designed to inventory experience in twenty general areas of independent recreational activities, would differentiate felons and non-felons possessing similar characteristics. As an adjunct to the study, an additional purpose was to determine whether the differences between felons and non-felons held true for both whites and blacks. The primary aim of the study was to achieve a clearer understanding of the significance of experience in certain independent recreational activities in relation to delinquent behavior in individuals.

Methods

The taped questionnaire was presented to ninety-two youthful felons incarcerated for their first time in a penitentiary. The same questionnaire was then presented to a non-felon sample of youthful males which was approximately matched to the felon sample in respect to age, socio-economic status, race, educational achievement, and community of origin.

The data collected was dichotomized by felon and non-felons. These dichotomies were further dichotomized as black and white. The responses of the study sample was placed into frequency tables to which the chi square statistic was applied to determine the significance of the differences. Those items for which the chi square test yielded a probability factor of less than .10 were presented separately because they showed the direction of difference in the recreational experience quite powerfully. Those items which tested at a level less significant were presented showing percentages of N only, to show direction. While those which tested more significant than .10 were shown in tables which reflected percentage of N, chi square, and probability factor.

Findings

1. Nine of twenty general areas of independent recreational experience did not differentiate between felons and non-felons at less than the .10 level of significance. These were modeling, record or tape collecting, water skiing, boating, hiking, bicycling and trips, and skating.

2. Eleven of the areas did contain items which differentiated felons and non-felons at less than the .10 level. These were photography, stamp and coin collecting, reading, musical instruments, swimming, fishing and hunting, camping, horseback riding and use of transportation.

3. Of the 113 specific items of experience inventoried, twenty differentiated felons and non-felons at less than the .10 level.

4. Ten of the twenty differentiating items were significant at the .05 level.

5. Train and motorcycle riding for both races and swimming over fifty yards for the white sample were reported more frequently by felons than non-felons.

6. In the remainder of the twenty items significant at the less than .10 level, felons reported less experience than non-felons.

7. In the items less significant than .10, the general tendency was for felons to report less experience than non-felons, with some racial differences.

8. Throughout most of the items investigated, the trend was for whites to report more experience than the blacks.

Supervising Professor

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CHAPTER I

BACKGROUND OF THE STUDY

Rationale

Intuitive reasoning may tell us that recreation, when considered to mean the activities one pursues during leisure time, is a significant part of the lives of individuals. Again intuitively, one can probably assume that recreational activities may have at least some influence upon the degree and quality of individual socialization.

Based on this concept and the concept that recreation is of value for personal satisfaction and for physical and mental fitness, nearly all institutions, from the family through the federal government plan for and provide recreational activities, funds, and facilities.

John Collier (1959), in an article in Recreation, stated that "Recreation is a vital and significant part of life. It can be a positive force in the lives of all, particularly young people." The National Conference of Prevention and Control of Juvenile Delinquency, in their Report of Recreation for Youth (1947), concluded that "Recreation must receive major attention in planning for the preservation and development of youth and in the prevention and control of juvenile delinquency."

The Gluecks and Shanus conducted studies which included an attempt to show the relationship between relatively specific

recreational activities and delinquency. The Gluecks (1950) found that there are certain individual activities, such as hobbies, in which significantly more non-delinquents participate than delinquents.

The Shanus study (1942), using data based primarily on the duration of use of public recreational facilities, suggests agreement with the Glueck's study. The studies, however, did not investigate the extent of expertise the subject had achieved in any given activity. Nor did they determine the range of activities each subject had experienced.

For example, the Shanus study listed swimming as a favorite activity of youth. This conclusion was based solely on time spent at the pool, irrespective of whether or not the subject even knew how to swim.

The studies indicated that much leisure time is spent in places other than public recreation areas (city settlement houses, boys' clubs, playgrounds, etc.). Little information is available as to what specific activities an individual youth pursues at home or other places.

This study addresses only a very small area of recreation. That is, to determine whether experience in the twenty independent recreational areas shown in Table 1 differentiate youthful felons and non-felons.

The study is concerned with differentiating felons and non-felons in terms of their experience in these selected independent recreational activities, to include their range of experience and their degree of involvement in the activities.

TABLE 1

LIST OF INDEPENDENT RECREATIONAL ACTIVITIES
CONSIDERED IN THE STUDY

1. Modeling	11. Fishing
2. Photography	12. Hunting
3. Stamp Collecting	13. Hiking
4. Coin Collecting	14. Camping
5. Reading	15. Horseback Riding
6. Record Collecting	16. Bicycling
7. Playing Musical Instruments	17. Skating
8. Swimming	18. Visiting Institutions
9. Water Skiing	19. Use of Transportation
10. Boating	20. Trips

Team sports were excluded from this study not because they were considered insignificant; indeed, it appears that team sports may have a positive influence in social adjustment. Since team sports and individual activities are different in nature, it may follow that their influence on social adjustment is of a different nature also.

Team sports appear to be relatively complete activities, with a beginning and an end to each game played. The player must find others willing to participate, and the facilities required to play the game in order to participate. A player may gain proficiency by playing more games, until he reaches an apex of a sort. From that time forward, he may play any number of games, each one adding essentially the same experience as the last. This could be considered a relatively non-independent, non-cumulative experience.

The activities considered in this study appear to be relatively independent and cumulative in nature. The individual can also participate without locating others with a similar desire at the same time.

The swimmer mastering a new stroke, the hiker completing his first fifty mile hike, and the coin collector who adds a new proof set to his collection have all added something to his repertoire of accomplishments or possessions. These additions were not there before and they may remain to be added to again.

The cumulative and individual aspects of the independent recreational activities including those considered in this study, as opposed to the group, relatively non-cumulative characteristics of team sports and other activities may indicate that these two broad categories of recreational activities impact differently upon the individual.

Need for Research

Research to determine the significance of independent recreational activities in relationship to social adjustment is appropriate. Such research may provide information for institutions at all levels. Those recreational activities found to differentiate adequately adjusted persons from those who are not might be incorporated into experimentation by institutions dealing with youth. These institutions may establish programs which provide assistance in program development which may reduce both initial and continuing delinquent behavior. On

the other hand, more exhaustive research might show such activities not to be related to delinquent behavior. In this case those specific items so determined could be considered non-contributory to delinquency control.

Purpose of the Study

The purpose of this study was to determine the extent to which responses to one hundred thirteen questionnaire items describing specific recreational experience would differentiate ninety-two male felons incarcerated at the Ferguson Unit of the Texas Department of Corrections, from ninety-two male non-felons, free in the society. The felon study sample was conveniently drawn from a population incarcerated in a penitentiary for the first time. The non-felon sample was composed of persons with similar characteristics as the felons in respect to age, race, socio-economic position, educational achievement and community of origin.

Two items of non-independent recreational experience were considered in the study. These items were included in the study to provide more information concerning the lives of the subjects. The items concerned dancing habits, and membership in the Boy Scouts of America.

The aim of this study was to achieve a clearer understanding of the significance of experience in certain independent recreational activities, in relation to delinquent behavior in individuals.

Assumptions

For the purpose of the study, the following assumptions were made:

1. The individual who has experience in several independent recreational activities has more ways available to spend his free time and has more alternatives for association with individuals and groups holding similar interest, than does an individual with no or limited experience in these activities.
2. There exists a relationship between an individual's experience with independent recreational activities and his general social adjustment.
3. An individual's experience and interest in independent recreational activities is essentially contingent upon his exposure to them.

Hypothesis

The Working Hypothesis. Non-delinquent male youths in the free society will report greater experience in independent recreational activities than will convicted felons when reporting their experience which occurred prior to their incarceration.

Statistical Hypothesis. Responses to some questionnaire items concerning the extent of experience with independent recreational activities will reflect significantly more experience when administered

to male youths in the free society than when administered to youths incarcerated for a felony conviction.

Null Hypothesis. Response to a questionnaire designed to inventory the extent of experience with selected independent recreational pursuits will not significantly differentiate between samples of a population of incarcerated felons and samples of a population of non-felons. Even when both samples share the same general characteristics other than a felony conviction, responses to the questionnaire will be comparable, and any difference will be due to chance alone.

If the null hypothesis is rejected and the statistical hypothesis is supported, it would appear that higher levels of experience with independent recreational pursuits are significant. This experience may tend to provide the individual with interests, goals, activities, values, and associations which generally influence his life style, which is directed toward non-delinquent behavior.

Other factors may have provided the influence which contributed to the non-delinquent life style besides the independent recreational experience. The respondent may have had other significant experiences, i.e., satisfying academic achievement or satisfying vocational experiences, or social experiences which may have encouraged his adoption of a non-delinquent life style.

If the null hypothesis cannot be rejected, this finding may indicate that experience in independent recreational activities is

an irrelevant factor in social adjustment of the individual and delinquent behavior. It might also indicate that the instrument (questionnaire) used to determine the extent of independent recreational experience was inadequate or the sample was not representative of the general population.

Basic Questions

The questions this study is designed to answer are:

1. Does the literature reveal a relationship between experience in independent recreational activities and social adjustment, or that a lack of such experience is an indicator of delinquency?
2. Is there any significant difference between youthful felons and non-felons in respect to experience in independent recreational activities when cross-tabulated by delinquency status and race, to one hundred thirteen independent recreational experience factors?
3. To what extent will the responses to one hundred thirteen questionnaire items regarding their past experience in independent recreational activities differentiate ninety-two convicted felons from ninety-two non-felons with similar characteristics.

Definition of Major Terms

For the purposes of this study, the following terms are assigned the specific meanings cited:

Felon - A convicted felon in the study sample.

Non-felon - A subject in the study sample who reports no felony arrests or convictions.

Independent Recreational Activity - A hobby, sport or other leisure time activity in which an individual may participate or may develop by himself. This includes the hiring of services or facilities, or buying components. This meaning does not imply that these activities cannot be participated in, or developed in group settings or with others.

Group Recreational Activities - Activities, team sports, as an example, which require the active participation of others in order for the individual to participate.

Methods and Procedures

Population and Criteria for Sample Selection. The population studied was dichotomized into criminal and non-criminal categories. Each of these sub-samples were then further dichotomized by race as black or white.

The total sample was composed of one hundred eighty-four subjects, ninety-two of which were convicted felons, and ninety-two of which were non-convicts. Of the ninety-two subjects in each dichotomy, fifty-five were black and thirty-seven were white.

The criminal subjects were all incarcerated in a penitentiary for their first time. The specific penitentiary from which the subjects were selected was the Ferguson Unit of the Texas Department of Corrections. Ferguson Unit is a penitentiary for youthful offenders.

All of the criminal subjects selected for this study reported that their last residence and the last school that they attended was in the Houston metropolitan area. Information pertinent to the criminal subjects was taken from prisoner summary records maintained by the Texas Department of Corrections and from inmate responses to the study questionnaire.

Non-criminal subjects for the study were identified and contacted with the cooperation of the Houston Independent School District, Division of Occupational and Continuing Education. Contacts and information supplied by this office yielded the majority of the subjects necessary for the study. Other agencies which cooperated in varying degrees were the Wheeler Street Baptist Church and Operation Breadbasket, both of which are affiliated with the Southern Christian Leadership Conference. Additional contacts with subjects were made through the Progressive Boxing Association, a model cities project.

The remainder of the non-felon subjects were located in the vicinity of Davis, Milby, Kashmere and Yates High Schools, in Houston. Two subjects were enrolled in Texas Southern University, and one in the University of Houston. Subjects were frequently recruited by other subjects previously contacted by the investigator.

The Questionnaire. The questionnaire consisted of two parts. Part I was designed essentially to elicit information concerning the respondents' residence, educational background, race, socio-economic status, and birth date. Part I also provided other social information about the subject such as whether or not he participated in programs of the Boy Scouts of America. If scouting was a factor in the subject's life, the questionnaire also included items which would reveal the extent to which the boy participated.

Part II of the questionnaire was designed to inventory the subjects' actual experience in twenty independent recreational activities. The one hundred thirteen items concerning the twenty different areas of activity provided a means of measuring to some degree the subjects' range of experience, as well as their depth of involvement in the activities.

Collection of Data. The questionnaire was recorded on tape (a manuscript of the questionnaire and a copy of the response sheet appear as Appendices A and B, respectively). The felon subjects were interviewed at the Ferguson Unit in April, 1972. Groups of from twelve to nineteen attended the sessions.

The investigator used approximately ten minutes to explain the questionnaire and gain rapport with the subjects. Each subject was issued a response sheet and a pencil. The subjects responded to the taped questionnaire by marking the response sheet as appropriate. The inmate subjects were instructed that the items of the questionnaire

applied only to activities they personally experienced, did for fun or sport, and experienced prior to their incarceration.

The non-inmate sample received the same instructions as the inmates except that the portion pertaining to incarceration was deleted. Non-inmate subjects were interviewed in much the same manner as the inmate subjects. Notable exceptions were the time of day, the size of groups, and place of the interview. It was necessary to conduct the interviews to groups as small as two, and as late as 10:30 p.m. Interviews were conducted under conditions ranging from back rooms of small stores through parks and parking lots, to church steps. Nearly one hundred eighty non-felon subjects were interviewed. About half were eliminated from the study sample because they lacked the criteria to match the criminal sample. The non-felon subjects were interviewed during the month of May, 1972.

Matching the Sample. Non-felons in the study sample were matched to the felon study sample with respect to race, age, educational achievement, socio-economic status, and area of residence. Matching for race was accomplished by presenting the interview to ninety-eight black subjects and seventy-nine white subjects.

All of the felons and all of the non-felons were residents of the Houston metropolitan area. Each subject last attended a school in the Houston Independent School District, or a suburban school district immediately adjacent to the Houston Independent School District. Some of the latter group lived and attended school in enclave communities,

which fall geographically within the Houston city perimeter, but are politically separate from the city of Houston.

Educationally the matching was accomplished by selecting subjects who had completed the last grade completed by the felon subject. In the case of school dropouts, the control subject was considered acceptable for this study if he had dropped out during the last grade completed by his felon counterpart.

In order to adequately match the samples for age (a very important facet of control in this study, in that age is assumed to be related to opportunities a person has to become exposed to the recreational items studied), the procedure followed included adjusting the ages of the felon sample.

The felon subject's age was reduced by the number of months he had been incarcerated by the Texas Department of Corrections, plus the number of months he had been incarcerated in jails prior to his penitentiary incarceration. This adjusted age was used to select non-felon subjects. The ages of the non-felons matched those of the felons within six months.

To generally match the samples for socio-economic background, an occupational rating scale was used. Each subject was asked to write on the questionnaire response sheet the type of work in which the head of his family was engaged. The job titles reported were matched or equated to those listed in the scale reported by Hodge (1964) in the American Journal of Sociology. An occupational prestige designation

was assigned to each subject. Designations 1, 2, 3, or 4 indicated that the subject fell within the top, second, third, or last twenty-five percent of the scale respectively. A fifth designation was added by the investigator to accommodate those subjects who reported unemployment, welfare, no source of income, etc.

Non-felon subjects who failed to meet the matching criteria established for the study were eliminated from the study sample.

Unit of Analysis. The data collected by means of the questionnaire were first cross-tabulated against the sample matching items and the items of general interest in describing the population. The final analysis was the cross-tabulation of the dichotomies against the one hundred thirteen items concerning experience with independent recreational activities.

The recreational data were analyzed first by the basic dichotomies of felon and non-felon, then by white felon and white non-felon, and last by black felon and black non-felon. The purpose of the analysis by race was to determine whether the recreational variables equally differentiated between the felons and non-felons of the two races in the study sample. This was done, essentially, to determine if the antecedent variable, race, had any significant effect on recreational activities.

Distribution and Analysis of Data. For analysis purposes, each of the recreational experience items were distributed in 2 x 2 contingency tables. These tables were prepared for the combined

study population, the black study population and the white study population.

Frequency data necessary for these tables were taken from the questionnaire response sheets. The questionnaire required only positive responses, and these responses were tallied for each item for each subject group. This sum was then subtracted from the total number of subjects which yielded the number of negative responses for that group. Essentially then, the 2 x 2 contingency tables were composed of two columns, felon and non-felon (black, white, or combined). The rows of the table were for positive or negative responses.

The chi-square formula, $X^2 = \sum \frac{(fo-fe)^2}{fe}$ was applied to the frequency tables by computer. This procedure (Blalock, 1972) yielded the chi-square values, and the probability factor for each item. The resultant data is reflected horizontally in Chapter III for each item. The material is presented in tabular form and appears under the heading of the general area under consideration.

The chi-square test statistic compares frequencies rather than percentages. However, to make the tabulated data in Chapter III more meaningful to the reader, percentages are reflected rather than frequencies. The raw data used for analysis is shown in Appendix C.

Description of the Study Population

This portion of the study provides certain information somewhat descriptive in nature, which is known about the study sample. Some of

the general information was available for both the felon and non-felon subjects. The criminal behavior of the felon subjects is reported in Appendix D.

Schools Attended. All of the study subjects last attended school in the Houston metropolitan area. The fifty-five black felon subjects last attended twenty-one different schools. The thirty-seven white felon subjects last attended twenty-seven different schools. Only two white criminal subjects reported that they had last attended schools which black subjects also reported attending last. The total number of Houston metropolitan area schools attended by the convicted felon subjects was forty-six.

Thirty-three of fifty-five black felon subjects last attended a school which is considered to be high or very high in respect to dropout rates by school district officials. Only one of the thirty-seven white felon subjects last attended a school so rated by school district officials.

School Achievement. School achievement for this study is based solely upon the highest grade completed. The dropout rate, that is, the number of the total subject population which failed to complete high school was very high. Table 2 shows that of the total population of one hundred eighty-four, only thirteen completed high school. In that the non-felon population was deliberately selected to match the felon population as nearly as possible, it is more meaningful to consider the school achievement of the felon population only.

TABLE 2

SCHOOL ACHIEVEMENT, REFLECTED BY HIGHEST GRADE
COMPLETED, FELON AND NON-FELON, BY RACE

Highest Grade Completed ^a	Felon		Total (N=92)	Non-Felon		Total (N=92)	Grand Total (N=184)
	White (N=37)	Black (N=55)		White (N=37)	Black (N=55)		
7 or less	1	2	3	2	3	5	8
8	11	5	16	13	6	19	35
9	13	11	24	10	13	23	47
10	3	17	20	5	21	26	46
11	8	14	22	6	7	13	35
12	1	6	7	1	5	6	13
Some College ^b	(0)	(3)	(3)	(0)	(3)	(3)	(3)

^a19 Non-felon subjects attempted but did not complete the highest grade completed by the felon sample.

^bSubjects entered in this row are included in the row reflecting completion of the twelfth grade.

The table shows that of the thirty-seven white felons, only one completed high school, and he did not enroll in college. Of the fifty-five black felons, only six completed high school, one-half of which entered college.

The table also shows that the whites tended to drop out of school earlier than did the blacks. The educational level among the non-felon population varied somewhat from that of the felon population. This is partially a result of the procedure which used for matching purposes, educational standards somewhat lower. For example, where the felon had finished a specific grade, his match in nineteen cases had begun, but not completed that grade. The other reason for inaccurate matching in relation to educational achievement was the difficulty in locating subjects willing to participate.

Availability of Telephones. One questionnaire item was designed to determine whether or not the subjects had a telephone available where they lived. Responses to the item revealed that: thirty-two of thirty-seven white felons, and thirty of thirty-seven white non-felons had a phone in their last home. Of the fifty-five black felons, fifty-one reported that they had a phone, while forty-nine of the fifty-five black non-felons reported a phone in their residence.

Availability of Automobile and Drivers Licenses. When queried as to whether they had the use of an automobile and if they had a drivers license, the subjects responded as shown in Table 3. The table indicates that a considerable number of both felons and non-felons

TABLE 3

USE OF AUTOMOBILE AND POSSESSION OF DRIVERS
 LICENSE, FELON AND NON-FELON, BY RACE^a

	Felon		Total	Non-Felon		Total
	White	Black		White	Black	
Had use of car	35	40	75	36	42	78
Had drivers license	23	18	41	31	29	60

^aTotal felon sample = 92

Total non-felon sample = 92

drive without licenses. It appears that the felon subjects were less likely to be licensed drivers than were the non-felons.

Age of Sample. All of the felon sample subjects were born during the period 1951-1953. The non-felon sample was matched to the felon sample in respect to age, except that they were matched to an adjusted age. The adjusted age was derived by subtracting the time incarcerated from the actual age of the felon subjects. The non-felon subjects were all born during the period 1952 through 1955.

Occupation of Head of Household. The non-felons were matched as closely as practical to the felon subjects in respect to occupational status of the head of the family. Table 4 shows the results of this portion of the investigation. The table shows little difference between the criminal and non-criminal subjects, but suggests a more significant difference between black and white subjects.

TABLE 4

OCCUPATIONAL STATUS OF HEAD OF HOUSEHOLD,
FELON AND NON-FELON, BY RACE

	Felon		Total	Non-Felon		Total	Grand Total
	White	Black		White	Black		
Category I ^a	2	0	2	0	0	0	2
Category II ^a	5	5	10	3	4	7	17
Category III ^a	19	18	37	22	15	37	74
Category IV ^a	10	17	27	12	20	32	59
Category V ^b	1	15 ^c	16	0	16	16	32

^aCategories I through IV represent the 1st, 2nd, 3rd, and 4th quarter, respectively of The Occupational Prestige Scale reported by Hodge in the American Journal of Sociology, November, 1964.

^bCategory V was used to designate that no occupation was reported, or that the respondent reported unemployment or welfare.

^cIncluding one subject who reported his father was a disabled veteran.

Dancing Habits. Table 5 shows the responses made by subjects to items of the questionnaire which elicited information concerning their dancing habits. The table indicates little difference between the major dichotomies or the races, in relation to dancing. The table shows also that some respondents who reported knowing how to dance, in fact never dance.

Participation in Programs of the Boy Scouts of America. Of the thirty-five black inmates, twenty-one indicated they had been Cub

TABLE 5

DANCING HABITS, FELON AND
NON-FELON, BY RACE

	Felon		Total	Non-Felon		Total	Grand Total
	White	Black		White	Black		
Knows how to dance	31	48	79	32	49	81	169
Danced Frequently	6	22	28	8	21	29	57
Danced only occasionally	17	23	40	19	25	44	84

Scouts, and twenty reported membership in the Boy Scouts. Of the 55 black non-inmates, twenty-four reported that they had been Cub Scouts, while eighteen claimed membership in the Boy Scouts.

Seventeen of the thirty-seven white felons reported membership in the Cub Scouts, and thirteen in the Boy Scouts. Among the white non-felons twenty-one reported Cub Scout membership, while eighteen reported membership in the Boy Scouts.

Three black felons and one white felon reported Eagle Scout status. Of the non-felons, four black and no whites claimed that status.

Marital Status. Four black and two white non-felons stated they were married. In the felon sample, three whites indicated that they were married (including one common law), and one reported that he was divorced. Four black felons were married.

Military Experience. Two black and one white non-felons reported membership in the Reserve components of the Army. In the felon sample, no blacks had any military experience, while two whites reported some military experience.

CHAPTER II

REVIEW OF THE LITERATURE

Previous studies concerning the significance of recreational experience in relation to delinquency have been few. Empirical studies oriented toward identifying specific recreational activities which might be more or less frequently pursued by felons than non-felons do not appear to have been conducted. No study was located by the investigator which concentrated on independent recreational activities as they relate to felonious behavior.

This study investigated the differential experience in certain independent recreational activities between felons and non-felons. The bulk of the literature concerning the subject matter is oriented toward juvenile delinquents. Research of the literature concerning juvenile delinquency and recreation is not inappropriate for this study. The youth of the study samples indicates that the types of experience studied occurred for the most part, during the juvenile period of their lives.

The National Conference on Prevention and Control of Juvenile Delinquency indicated (1947) that there are many dimensions by which recreation can be analyzed. These include the population served, degree of organization, amount of physical and mental activity

required, and the degree of individual or group participation, facilities used, and individual preference. This study review considers primarily the dimensions of the degree of organization and individual preference.

Value of Organized Recreation in
Relation to Delinquency

Supporting Authorities

If we consider recreation to be as John Collier (1959) defined it in an article in Recreation, recreation is what a person does when nobody and no social pressures tells him what he must do.

Few empirical studies have been conducted to determine what, if any, specific recreational activities will differentiate felons from non-felons. Irrespective of this paucity of information, many writers in the field of delinquent behavior are convinced that recreation is a vital and significant part of life. Some (National Conference, 1947) feel that recreation can be a positive force in the lives of all, particularly young people.

How much impact recreation has on behavior and social adjustment of the individual is a matter of some controversy. At least one National Conference (1947) concluded that recreation has therapeutic value as a part of the social treatment of individuals and groups.

Witmer and Tufts (1954) added a facet to the value of recreation when they appraised studies of programs for the prevention of

juvenile delinquency. They noted that one function of these programs, which included recreation, was to prevent delinquent behavior, the other was to reduce recidivism.

Robert Caldwell (1967) is of the opinion that organized, supervised recreation, when properly planned and administered, can be a very important element in the program for prevention of crime and delinquency. He states that every child should have access to such wholesome leisure time activity.

The authorities who assert that a relationship exists between recreation and delinquency offer little information as to the nature of that relationship. The majority of these assertions appear to be based upon a study (Elliot, 1963), which concluded that the misuses of spare time leads to delinquency, or that people are delinquent because they have nothing else to do.

Referring to the value of recreation in prisons, in the book Teach Them To Live, Banks (1958) reports the value of music and choral groups, and handicrafts and hobbies, in English prisons. He states that these activities, and nature classes have an ameliorating effect on the prisoners.

The Gluecks (1934), in their book 1,000 Delinquents, commented that it was particularly important that children have decent and constructive leisure time outlets. This helps to keep them from forming undesirable habits and companionships. In the study of delinquents in Boston which was reported in the book, they found that

over ninety percent of the delinquents had used their leisure time harmfully. That is, they had pronounced bad habits, associations, and degradations which may have led to delinquency. Examples of these bad habits were reported in hanging around the streets, gambling, and like matters.

Authorities in Opposition

Several studies have been undertaken in an attempt to relate recreation in the generic sense, to delinquency prevention. Shanus and Dunning (1942) conducted extensive research for the Chicago Recreation Commission in the late 1930's. They studied both slum and middle class neighborhoods of Chicago. The population studied consisted of over 23,000 children from the ages of ten through seventeen years.

They concluded that little could be expected of traditional recreation programs toward preventing juvenile delinquency. The programs attracted too few of the juveniles, especially those in the older groups.

Thrasher (1936) studied Boys' Clubs of New York during the period 1927-1931. Thrasher concluded that the clubs were unable to neutralize the negative impact of other influences on the boys. His findings further imply that club membership may have not only failed to reduce delinquency, but may have caused it to increase.

Ellery Reed (1942) tested the hypothesis that delinquency prevention agencies tended to serve those children who were not likely to become delinquent. His findings appeared to support his hypothesis.

The Truxal (1925) study considered adequacy of recreation centers in New York. His study did not show that the availability of playgrounds and parks operated to reduce delinquency.

In reviewing studies concerning organized recreational activities, it appears that the usual sort of recreational program is not very effective in preventing or reducing delinquency (Lutzim and Orem, 1967).

The Gluecks (1950) in their exhaustive study of 500 matched pairs of juveniles found that prior attendance at Boys Clubs was not significantly related to delinquency. This does not refer to frequency of attendance.

Clyde Vedder (1954) reports that delinquent behavior tends to increase after school hours and after supper. He cites as the primary reason for this increase, a lack of adult supervision. Vedder goes on to say that children sometimes fill their time with unlawful activity, and that provision of facilities for so-called wholesome recreation does not seem to alter the situation to any large extent.

In their book New Horizons in Criminology, Barnes and Teeters (1959) indicate that in many of our congested cities, thousands of youngsters who have few opportunities for wholesome recreation do not become delinquent. They state that lack of recreation, per se, causes

little delinquency. A further look at some of the literature appears to provide some insight into the reason for the apparent failure of organized recreation and may point in the direction of independent recreation as a field of study in its relation to delinquent behavior.

James Wylie (1963) suggests a number of reasons public recreation programs fail the delinquent. He states that public programs require too much competition and skill, and too often they require fees. He also cites as problem areas: inadequate active participation, lack of choices, lack of year round scheduling, not enough continuity, and inadequate staff, both in numbers and training.

Indicated Differences In Recreational Preference
Between Delinquents and Non-Delinquents

The position that delinquents tend to be somewhat more adventurous and thrill seeking than non-delinquents is held by many writers in the field. Elizabeth Ferguson (1963) in a discussion concerning the effectiveness of the Scouting program and other boys' clubs points out that delinquency is after all a leisure time activity, and often it is much more exciting than any supervised recreational program.

A study by Healy and Bronner (1936) compared delinquents and non-delinquents in respect to several recreational activities. They found that more delinquents than non-delinquents demonstrated marked interest, activity and skill, in sports. In the same study they found that non-delinquents were notably more fond of reading than were delinquents.

In respect to independent recreational activity in their study, Shanus and Dunning (1942) suggested that non-delinquents were more likely to participate in hikes, outings, skating, trips and crafts, than were delinquents. The study based its findings on the recorded amount of time spent in the activity while under supervision or influence of official city recreation programs and facilities.

The Gluecks' (1950) research revealed marked differences regarding leisure time activities between delinquent and non-delinquent youth. Less than half as many delinquents as non-delinquents spent some of their leisure time at home. The delinquent also expressed a much greater preference for adventurous activities than did the non-delinquents.

Interviews with the research staff psychiatrist for the Glueck project disclosed significant differences between delinquents and non-delinquents in respect to their hobby interests. The percentage of the delinquent sample which had hobbies was 11.3 percent, while 28.9 percent of the non-delinquents had hobbies of some sort (Gluecks, 1950).

The research accomplished by the Gluecks (1950) identified reported preference for adventurous activities and sports by non-delinquents and delinquents. A much higher proportion of delinquents than non-delinquents (47.9 percent; 9.5 percent) expressed a preference for adventurous activity. A somewhat lower percentage (36.8 percent; 46.5 percent) preferred active sports free of the

element of competition. Fewer delinquents than non-delinquents (7.7 percent; 29.0 percent) chose competitive sports or games, and even fewer (2.7 percent; 7.8 percent) were content with quiet types of amusement.

Five years after the conclusion of the research reported in Unraveling Juvenile Delinquency, the Gluecks followed their original subjects, the results of their follow-up studies were reported in their book Delinquents and Non-Delinquents in Perspective (1968). They found that more of the delinquents than non-delinquents spent most of their leisure time away from home. The delinquents reading interests were also more limited than those of the non-delinquents.

Kvaraceus (1954), discussing the recreational preferences of delinquents, said that "as we might expect, the recreational preferences of delinquents tend to fall in the adventurous and less orthodox categories."

Importance of Independent Recreational Activity

Jerome Rozycki (1948), discussed recidivism among first offenders and use of leisure time in a doctoral dissertation. In his study of ex-prisoners he found that they had extremely limited ideas of possibilities for recreation. He indicated that prison programs should introduce to them, and establish an interest in various forms of leisure time use. He recommended that the prison education program

should also provide them with wholesome and sustaining outlets for their energies, a factor which also may have value in socialization.

The position of the American Correctional Association (1966) concerning certain independent recreational activities is that cultural activities and arts and crafts should be an integral part of every prison recreational program. The Association's point is that these activities have a special significance in the institutional setting, where there is need for the inmate to find release from the pressures of prison routine during his leisure hours. The Association also recommends that music, literary and reading programs be employed.

There are many types or categories of recreational programs, some are tax supported, some are private agencies, some are supported by fraternal organizations, and many are commercial enterprises. Kvaraceus (1954) made what appears to be an important observation about recreation when he identified another category. That category, perhaps the most important category of recreation can perhaps best be presented as self or individual recreation.

This area of recreation has to do with the vast number of informally conducted activities that are engaged in during leisure time, but without outside sponsorship or leadership, and apart from any specific community facility. Frequently this is the only type of recreation that a large proportion of the population has at its command. This type of leisure time activity is seldom found to characterize the delinquent and his family. This type of recreation is often least tainted by commercialism (Kvararaceus, 1954, p. 320.).

Paul Tappan (1949) states that unguided play is not necessarily delinquent in character. Tappan points out that many persons who never

become delinquent prefer and require such recreation. Moreover, he writes that there exists strong evidence that delinquents are not attracted to guided play, and often when they do participate in it, their behavior remains unchanged.

Cohen (1955) states that stealing, vandalism, etc., is often a form of recreation, and he asks why is it so appealing to some, while unattractive to others. Mountain climbing, chess, and other activities are also forms of recreation. Each individual, according to Cohen can choose between a host of alternative means for satisfying the common need for recreation.

Every choice made expresses a preference, which Cohen suggests reflects something about the chooser or his circumstances, which endows the object of his choice with some special quality or virtue.

Conclusion

The literature shows a general lack of adequate empirical studies concerning the relationship of recreation to delinquency. Several studies (Shanus, 1942; Thrasher, 1936; Gluecks, 1950) have been made which included an attempt to determine whether a relationship exists, and if so to what extent. These studies have shown essentially non-conclusive results.

The authorities appear to be divided, but not evenly, in their assessment of the value of recreation in the prevention and control of delinquency. Those authorities (National Conference, 1947; Wittner and

Tufts, 1954; Caldwell, 1967; Banks, 1958; Gluecks, 1950) which tend to favor recreation per se, as a positive force in delinquency control are in the minority.

The majority of the writers in the field (Shanus and Dunning, 1942; Thrasher, 1936; Reed, 1948; Truxall; 1929; Lutzim and Orem, 1967; Barnes and Teeters, 1959; and Wylie, 1963) seem to agree in essence that recreation per se, and particularly organized recreation, have little effect on delinquency. The reason they cite for their position is that the programs are unattractive to the delinquent for one or more reasons.

Several studies (Healy and Bronner, 1936; Shanus and Dunning, 1942; Gluecks, 1950 and 1968; Kvaraceus, 1954; and Cohen, 1955) appear to have revealed some rather marked differences between delinquents and non-delinquents in their general recreational preferences.

Some authorities (Rozycki, 1948; American Correctional Association, 1965; Kvaraceus, 1954; Tappan, 1949; and Cohen, 1955) have pointed out the significance of personal choice and independent recreational activities in relation to delinquency.

The investigator found no literature directly concerned with independent recreational activities as they are related to felony. Nor was any research located which studied youthful felons and non-felons in their independent recreational preferences.

The literature researched made no inference as to whether or not racial differences were considered.

CHAPTER III

ANALYSIS OF THE DATA

The data from the questionnaire response sheet relative to the items of independent recreational experience was analyzed and is presented in two separate parts. The first part of the data analyzed and presented were those items which yielded a probability greater than .10 under the chi square test.

The second analysis and presentation included those questionnaire items upon which the chi square statistical test yielded a probability of less than .10. The rather arbitrary division point of the .10 level of significance was selected based on the purpose of this study. One of the purposes was essentially to determine whether or not the specific items of recreational items selected differentiated the felons and non-felons. The other reason was to determine the direction of the difference, between felons and non-felons, and between the two races included in the study sample.

This study was exploratory in nature, and no studies addressing the specific subject were available. For that reason the .10 level of significance was accepted for this study only. Those items which differentiate the study sample at that level may provide insight into the impact of independent recreation on human behavior, and supply the basis for more useful hypotheses for future studies.

In the tabular presentation of the data analysis, those items which did not differentiate the dichotomies on the .10 level of significance were shown by percentages only. Those items which differentiated the dichotomies at the .10 level of significance were tabulated by percentage, chi square and the level of probability.

The investigator made no attempt to justify as significant those items which were less significant than the .05 level. However, provided that the study sample was truly representative of the population, it is not illogical to assume that had the sample been larger, more items, particularly those at the .10 level but greater than .05 level might have become significant. This might have resulted as a function of the impact of a greater N on the Chi square statistic (Blalock, 1972).

In order to maintain consistency of format and to depict the data collected and analyzed, all those items which were significant at the .10 level are shown in tabular form if they differentiated the dichotomies in either race, or if they differentiated the combined dichotomies. This applied irrespective of whether the item differentiated all three categories of the sample.

General Analysis of the Data

Of the twenty general areas of recreational experience studied, the items of nine areas showed no differentiation at the .10 level of significance. Those areas were: modeling, record or tape collecting,

water skiing, boating, hiking, bicycling, skating and trips. These areas, including each item thereunder are shown in Table 6. That table shows percentages indicating the differences between felons and non-felons by race and by races combined.

The remaining eleven general areas: photography, stamp collecting, coin collecting, reading, musical instruments, swimming, fishing, hunting, camping, horseback riding, and use of transportation showed some items which did differentiate the felons and non-felons at the .10 level. Those items are shown in Table 7. Items within these eleven areas which did not differentiate the felons and non-felons are included in Table 6.

Of the one hundred thirteen specific items under the twenty general areas, eleven differentiated felons from non-felons at the .05 level of significance, and eleven items differentiated felons and non-felons at the .10 level.

In three cases the items differentiated the felons and non-felons of one race only. In nine cases the items served to differentiate the felons and non-felons when races were combined. In eight cases the items differentiated the felons and non-felons of the races combined and in one or more race. In only one case did the item discriminate between the felons and non-felons of both races.

Variables that Failed to Differentiate Felons and Non-Felons

The data from the questionnaire on experience in specific recreational items were initially consolidated into frequency tables.

TABLE 6

SPECIFIC INDEPENDENT RECREATIONAL ACTIVITIES WHICH DID NOT
DIFFERENTIATE FELONS FROM NON-FELONS AT THE .10 LEVEL

(Percentages of N by race and combined)

Item	White		Black		Combined	
	Felon N=37	Non-Felon N=37	Felon N=55	Non-Felon N=55	Felon N=92	Non-Felon N=92
	Modeling ^a					
Built Models	83.7	83.7	47.3	50.9	61.9	64.1
Built and operated powered tools	24.3	21.6	09.1	10.9	15.2	15.2
Read magazine articles about modeling	13.5	18.9	03.6	03.6	07.6	09.8
Belonged to model club	00.0	02.7	01.8	05.4	01.1	04.3
	Photography ^b					
Owned a camera	86.5	89.2	76.4	83.6	80.4	85.9
Took pictures	94.6	97.3	78.2	87.3	84.8	91.3
Took color slides	35.1	45.9	40.0	52.7	38.0	50.0
Read about photography	08.1	18.9	21.8	30.9	16.3	26.1
Belonged to photography club	00.0	02.7	03.6	05.4	02.2	04.3
	Stamp Collecting ^b					
Collected stamps	13.5	21.6	09.1	16.4	10.9	18.5
Collected U. S. stamps	13.5	21.6	10.9	16.4	11.9	18.5
Collected foreign stamps	10.8	13.5	01.8	03.6	05.4	07.6
Purchased new issues	08.1	13.5	05.4	10.9	06.5	11.9
Collected over 300 stamps	08.1	13.5	05.4	10.9	06.5	11.9
Belonged to stamp club	00.0	02.7	00.0	00.0	00.0	01.1

TABLE 6--Continued

Item	White		Black		Combined	
	Felon	Non-Felon	Felon	Non-Felon	Felon	Non-Felon
Coin Collecting ^b						
Collected coins	43.2	51.3	25.4	38.2	32.6	43.5
Collected U. S. coins	40.5	45.9	21.8	29.1	29.3	35.9
Collected foreign coins	18.9	24.3	12.7	12.7	15.2	17.4
Belonged to coin club	02.7	05.4	00.0	00.0	01.1	02.1
Reading ^b						
Read 5 to 10 books annually	37.8	37.8	30.9	40.0	33.7	39.1
Record and Tape Collecting ^a						
Had use of record or tape player	100.0	94.6	92.7	90.9	95.6	92.4
Collected records or tapes	97.3	91.9	87.3	85.4	91.3	88.0
Had less than 10 records or tapes	02.7	00.0	01.8	00.0	02.2	00.0
Had more than 10 records or tapes	94.6	94.6	85.4	85.4	89.1	89.1
Musical Instruments ^b						
Has played a musical instrument	54.0	59.5	36.4	49.1	43.5	53.3
Has played 2 or more musical instruments	21.6	18.9	14.5	20.0	17.4	19.6
Reads music	21.6	18.9	23.6	30.9	22.8	26.1
Has played 5 or fewer tunes	10.8	13.5	16.4	12.7	14.1	13.0
Owned an instrument	56.7	59.4	32.7	41.8	42.4	48.9

TABLE 6--Continued

Item	White		Black		Combined	
	Felon	Non-Felon	Felon	Non-Felon	Felon	Non-Felon
	Swimming ^b					
Has swam 25 yards or less	13.5	13.5	25.4	20.0	20.6	17.4
Has done 3 or fewer strokes	24.3	18.9	32.7	20.0	29.3	19.6
	Waterskiing ^a					
Has waterskied	43.2	51.3	05.4	07.3	20.6	25.0
Has skied with only one ski	18.9	24.3	01.8	03.6	08.7	11.9
Has skied ten minutes without falling	16.2	35.1	01.8	01.8	07.6	15.2
Owned waterskis	24.3	27.0	01.8	03.6	10.9	13.0
	Boating ^a					
Operated a boat	91.9	97.3	45.4	56.4	64.1	72.8
Rowed a boat	86.5	86.5	45.4	54.5	61.9	67.4
Paddled a canoe	51.3	56.7	16.4	20.0	30.4	34.8
Sailed a boat	21.6	27.0	07.3	14.5	13.0	19.6
Operated a motorboat	78.4	83.8	23.6	29.1	45.5	51.1
Owned or rented a boat	72.9	78.4	25.4	34.5	44.6	52.2
	Fishing ^b					
Has fished	100.0	100.0	92.7	90.9	95.1	94.6
Owned a rod and reel	91.9	81.1	70.9	70.9	79.3	75.0
Fished lakes or ponds	100.0	94.6	87.3	87.3	92.4	92.4
Fished streams or rivers	100.0	97.3	72.7	76.4	83.7	84.8
Fished in salt water	94.6	97.3	80.0	80.0	85.9	86.9

TABLE 6--Continued

Item	White		Black		Combined	
	Felon	Non-Felon	Felon	Non-Felon	Felon	Non-Felon
Fished from a boat	94.6	91.9	47.3	49.1	66.3	66.3
Cleaned a fish	94.6	97.3	87.3	89.1	90.2	92.4
	Hunting ^b					
Has hunted	91.6	97.3	80.0	85.4	84.8	90.2
Owned hunting firearm	83.8	89.2	43.6	47.3	59.8	64.1
Hunted big game	64.9	70.2	23.6	25.4	40.2	43.5
Hunted small game	91.9	94.6	72.7	76.4	80.4	83.7
Hunted birds	89.2	89.2	69.1	74.5	77.2	80.4
Hunted varmints	70.3	67.6	49.1	43.6	57.6	53.3
Dressed an animal or bird	86.5	91.9	80.0	87.3	82.6	89.1
	Hiking ^a					
Hiked more than 10 miles in one day	48.6	56.7	25.4	30.9	34.8	41.3
Hiked more than 20 miles in one day	21.6	29.7	16.4	21.8	18.5	25.0
Hiked and stayed out overnight	37.8	48.6	30.9	34.5	33.7	40.2
Carried campgear and food	37.8	48.6	23.6	29.1	29.3	36.9
Hiked cross country with map and compass	18.9	23.3	12.7	16.4	15.2	19.6
	Camping ^b					
Has gone camping	97.3	97.3	56.7	65.4	72.8	78.3
Camped out 3 consecutive nights	86.5	83.8	32.7	40.0	54.3	57.6

TABLE 6--Continued

Item	White		Black		Combined	
	Felon	Non-Felon	Felon	Non-Felon	Felon	Non-Felon
Camped out in foul weather	78.4	83.8	20.0	29.1	43.5	51.1
Camped in primitive campsite	64.9	70.3	14.5	21.8	34.8	41.3
Prepared a meal in camp	75.7	81.1	43.6	50.9	56.5	63.0
Camped as a member of a group	81.1	83.8	40.0	47.3	56.5	61.9
Horseback Riding ^b						
Has ridden horseback	100.0	97.3	92.7	90.9	95.6	93.5
Saddled and bridled a horse	62.2	70.3	52.7	61.8	56.5	65.2
Rode 10 miles at one time	43.2	56.7	34.5	47.3	38.0	51.1
Rode as member of group	32.4	43.2	38.2	49.1	35.9	46.7
Bicycling ^a						
Rode a bicycle	100.0	97.3	100.0	96.4	100.0	96.7
Owned a bicycle	100.0	97.3	100.0	96.4	100.0	96.7
Rode a bicycle with 3 or more speeds	97.3	91.9	96.4	92.7	96.7	92.4
Rode 10 or more miles at one time	75.7	83.8	56.4	65.4	64.1	72.8
Rode 50 miles in one day	18.9	24.3	20.0	30.9	19.6	28.3
Went on a bike trip as a member of a group	45.9	59.4	40.0	52.7	42.4	54.3
Skating ^a						
Has roller skated	91.9	94.6	65.4	65.4	76.1	77.2
Has ice skated	32.4	37.8	14.5	23.6	21.7	29.3
Has skated less than 5 times	16.2	10.8	23.6	20.0	20.6	16.3

TABLE 6--Continued

Item	White		Black		Combined	
	Felon	Non-Felon	Felon	Non-Felon	Felon	Non-Felon
Has skated more than 5 times	75.7	83.8	40.0	45.4	54.3	60.9
Owned skates	64.9	75.7	47.3	52.7	54.3	61.9
Visits to Public Institutions ^a						
Visited a city zoo	94.6	97.3	87.3	85.4	90.2	90.2
Visited a public library	54.0	64.9	69.1	80.0	63.0	73.9
Visited a museum	48.6	56.7	69.1	78.2	60.9	69.6
Visited a state or national park	94.6	94.6	65.4	69.1	77.2	79.3
Visited the Astrodome	78.4	86.5	92.7	90.9	86.9	89.1
Transportation ^b						
Has ridden a highway bus	89.2	91.9	85.4	90.9	86.9	91.3
Has ridden an airplane	72.9	78.4	34.5	43.6	50.0	57.6
Trips ^a						
Has been to two or more states	97.3	97.3	70.9	74.5	81.5	83.7
Has been to Mexico	67.6	70.3	50.9	52.7	57.6	59.8
Has been to foreign country other than Mexico	34.1	32.4	09.1	10.9	19.6	19.6
Has been to San Antonio	81.1	83.8	65.4	70.9	71.7	76.1
Has been to Dallas and Fort Worth	83.8	83.8	61.8	74.5	70.6	78.3

^aNo sub item in this general category differentiated felons and non-felons at a level less than .10.

^bAt least one sub item in this general category differentiated felons from non-felons, and is tabulated elsewhere in the study.

TABLE 7

FELONS AND NON-FELOND DIFFERENTIATED BY SPECIFIC ITEMS OF RECREATIONAL EXPERIENCE. PERCENTAGE OF N, CHI SQUARE, AND PROBABILITY^a

Item	Felon N=92	Non-Felon N=92	Chi Square	Probability
Photography				
Developed negatives	06.5	15.2	2.749	.0936
Printed pictures	05.4	15.2	3.756	.0498
Stamp Collecting				
Read articles about stamp collecting	06.7	19.6	3.628	.0539
Coin Collecting				
Purchased proof or uncirculated coins	20.6	32.6	2.782	.0916
Read articles about coin collecting	25.0	40.2	4.180	.0368
Reading				
Read less than 3 magazines month	48.9	30.4	5.813	.0153
Read more than 3 magazines month	51.1	69.6	5.813	.0153
Read less than 4 books annually	35.9	20.6	4.530	.0314
Read more than 10 books annually	30.4	40.2	2.989	.0802
Musical Instruments				
Played more than 5 tunes	29.3	40.2	1.941	.1602
Played with band or orchestra	28.3	41.3	2.899	.0852

TABLE 7--Continued

Item	Felon N=92	Non-Felon N=92	Chi. Square	Probability
Swimming				
Swam over 50 yards	31.5	15.2	5.948	.0142
Floated at least 2 minutes	68.5	83.7	5.044	.0234 ^b
Has done 3 or more different strokes	70.6	80.4	0.027	.8644 ^b
Fishing and Hunting				
Had fishing license	33.7	46.7	2.735	.0944
Had hunting license	31.5	47.8	4.451	.0329
Camping				
Owned tent or sleeping bag	51.1	64.1	2.693	.0970
Horseback Riding				
Has ridden bareback	59.8	68.5	6.479	.0107
Transportation				
Has ridden a train	68.5	55.4	2.790	.0911
Has ridden a motorcycle	82.6	53.3	16.866	.0002

^aRefer to Table 8 for data broken down by race.

^bItems discriminating at the .10 level are shown because sub-population data in Table 8 reveals that the item was significant at least at the .10 level for one of the racial groups.

The chi square statistic was then applied to each item to determine if it significantly differentiated between subject groups. For those items that failed to discriminate, the percentage of N was computed. This computation was applied to the felons and non-felons of both races, and the races combined. The results of the computation appears in Table 6.

Analysis of Data Statistically Significant at the .10 Level

Specific items of recreational experience from eleven of the general recreational areas tested significant at the .10 level. These items, the percentage of subjects who responded positively to them, their computed chi square and probability are shown in detail in Table 7. A brief discussion of the data follows, by general area.

Differentiating Items, Felon and Non-Felon

Photography. Table 7 shows that the percentage of felons who reported having developed negatives and printing pictures is lower than that of non-felons.

Stamp collecting. In the study sample, 19.6 percent of the non-felons and 06.7 percent of the felons reported reading articles about stamp collecting.

Coin collecting. Two items under the general area of coin collecting differentiated felons and non-felons at the level of significance reported in the table. Considerably more non-felons than

felons purchased proof or uncirculated coins, and significantly (chi square = 4.180) more non-felons than felons read articles concerning coin collecting.

Reading. Reading habits tended to differentiate felons and non-felons to varying degrees. Felons reported reading less than three magazines each month, and less than four books annually more often than did non-felons.

Non-felons reported reading more than three magazines each month, and more than ten books each year more often than the felons.

Musical instruments. Non-felons reported playing more than five tunes and playing with a band or orchestra much more often than did the felons.

Swimming. Significantly more felons (31.5 percent: 15.2 percent) than non-felons reported having swum over fifty yards. In their responses to items designed to elicit their experience in floating, significantly (83.7 percent versus 68.5 percent) more non-felons than felons reported they had floated for two minutes. Considerably more non-felons than felons also reported having executed three or more different strokes.

Fishing and Hunting. A considerably higher percentage of non-felons reported having been issued hunting and fishing licenses.

Camping. More non-felons than felons (64.1 percent versus 51.1 percent) reported having owned a sleeping bag or tent.

Horseback riding. A significantly larger percentage (68.0 percent versus 59.8 percent) of non-felons than felons responded positively to the item asking whether they had ridden bareback.

Transportation use. More felons than non-felons reported that they had ridden railroad trains. Far more felons than non-felons (82.6 percent versus 53.3 percent) stated they had ridden motorcycles.

Analysis of Data Significant at the .10 Level, by Race

The material covered in this brief discussion is essentially the same material covered earlier. The data previously covered was compiled by combining the data for each racial group. The data briefly discussed here, and shown in Table 8 shows the responses for the two racial groups as a percentage of N, chi square and probability factor. The major purpose for this discussion and Table 8 was to allow for a comparison of the two races in their responses to those items found to differentiate felons and non-felons at the .10 level of significance.

Photography. In the area of photography, felons of both races responded less frequently than non-felons to the questionnaire item which determines whether they had developed negatives and printed pictures. Approximately twice as large a percentage of whites had developed negatives and printed pictures as had blacks.

Stamp collecting. White non-felons reported reading about stamp collecting far more frequently than black non-felons (18.9 percent versus 08.1 percent), and white felons reported a higher incidence of this activity than did black felons (20.0 percent versus 09.1 percent).

TABLE 8

FELONS AND NON-FELONS, BY RACE, DIFFERENTIATED BY SPECIFIC ITEMS OF RECREATIONAL EXPERIENCE. PERCENTAGE OF N, CHI SQUARE AND PROBABILITY^a

Items	White			Black		
	Felons N=37	Non-Felons N=37	Chi Square	Felons N=55	Non-Felons N=55	Chi Square
						Probability
Photography						
Developed negatives	08.1	21.6	1.709	05.4	10.9	0.484
Printed pictures	08.1	21.6	1.709	03.4	10.9	1.213
						^b .5060
						^b .2702
Stamp Collecting						
Read articles about stamp collecting	08.1	18.9	1.041	09.1	20.0	1.828
						^b .1731
Coin Collecting						
Purchased proof or uncirculated coins	16.2	29.7	1.222	23.6	34.5	1.102
Read articles about coin collecting	27.0	48.6	2.815	23.6	34.5	1.102
						^b .2945
						^b .2943
Reading						
Read less than 3 magazines monthly	43.2	32.4	0.517	52.7	29.1	5.415
Read more than 3 magazines monthly	56.7	67.6	0.517	47.3	70.9	5.415
						^b .0190
						^b .0190

TABLE 8--Continued

Items	White		Black					
	Felons N=37	Non- Felons N=37	Chi Square	Proba- bility	Felons N=55	Non- Felons N=55	Chi Square	Proba- bility
Read less than 4 books annually	35.1	27.0	0.252	.6217 ^b	36.4	16.4	4.683	.0288
Read more than 10 books annually	27.0	35.1	0.252	.6217 ^b	32.7	43.6	0.963	.6723 ^b
Musical Instruments								
Played more than 3 tunes	43.2	45.9	0.0	1.00 ^b	20.0	36.4	2.875	.0863
Played with band or orchestra	32.4	43.2	0.517	.5207 ^b	25.4	40.0	2.023	.1513 ^b
Swimming								
Swam over 50 yards	56.7	02.7	23.351	.001	14.5	23.6	0.942	.6666 ^b
Floated at least 2 minutes	75.7	86.5	0.793	.6230 ^b	63.6	81.8	3.713	.0512
Has done 3 or more different strokes	75.7	81.1	3.531	.0572	67.3	80.0	1.686	.1913 ^b
Fishing and Hunting								
Had fishing license	56.1	72.9	1.482	.2213 ^b	18.2	29.1	6.177	.0126 ^b
Had hunting license	51.3	72.9	2.815	.0896	18.2	30.9	1.767	.1807 ^b

TABLE 8--Continued

Items	White		Black					
	Felons N=37	Non-Felons N=37	Chi Square	Probability	Felons N=55	Non-Felons N=55	Chi Square	Probability
Camping								
Owned tent or sleeping bag	75.7	83.8	0.334	.5404 ^b	34.5	50.9	0.029	.8585 ^b
Horseback Riding								
Has ridden bareback	51.3	59.4	0.2190	.6454	65.4	74.5	0.693	.5895 ^b
Transportation								
Has ridden a train	81.1	64.9	1.713	.1877 ^b	60.0	49.1	0.917	.6597 ^b
Has ridden a motorcycle	100.0	75.7	8.096	.0048	70.9	38.2	10.597	.0016

^aRefer to Table 7 for combined data.

^bItems appearing with probability factors less significant than (< .10) are shown because the item was significant at the (< .10) level for the other racial group or in the combined sample shown in Table 7.

Coin collecting. More non-felons than felons reported purchasing proof or uncirculated coins and reading articles about coin collecting. The two items differentiated the blacks identically. In the white sample, reading about coin collecting yielded the greatest significance. White non-felons reported this activity much more frequently (48.6 percent versus 27.0 percent) than the felons.

Reading. The white and black felons reported more frequently than non-felons that they read three or fewer magazines monthly and less than four books annually. The non-felons of both racial groups reported a higher incidence of reading more than three magazines monthly and over ten books annually. The difference between the felons and non-felons were most significant within the black sample, where three of four items yielded a .03 level of significance.

Musical instruments. Non-felons in both racial groups reported more experience than the felons. The white sample indicated more experience than the blacks.

Swimming. Within the white sample, a much larger percentage of the felons reported having swum over fifty yards (56.7 percent versus 02.7 percent). The white non-felons in their responses to the other items and the black non-felons in their responses to all three items showed more experience than the felons. The tendency was for the white sample to reflect greater experience than the blacks.

Fishing and hunting. The non-felon sample in the black and the white population showed a greater tendency to have been issued hunting

and fishing licenses than the felons. Significantly more whites than blacks had possessed licenses.

Camping. Considerably more non-felons than felons of both races reported ownership of a tent or a sleeping bag. A much larger proportion of whites than blacks had owned tents or sleeping bags.

Horseback riding. A larger percentage of non-felons, both black and white had ridden bareback than had the felons.

Transportation usage. A much larger percentage of felons in both racial groups reported they had ridden railroad trains and motorcycles than did the non-felons. The percentage of whites reflecting this data was considerably larger than the percentage of blacks.

CHAPTER IV

FINDINGS AND RECOMMENDATIONS

This study attempted to answer three basic questions. The first question was: Does the literature reveal a relationship between experience in independent recreational activities and social adjustment, or that lack of such experience is an indicator of delinquency?

The first basic question was answered in the conclusion of Chapter II. While the authorities seem to be divided about the relationship of recreation, per se, to delinquency, the preponderance of the literature either questions or denies the relationship. Several studies, however (Healy and Bronner, 1936; Shanus, 1942, Gluecks, 1950; Kvaraceus, 1954; Cohen, 1955) suggest that there is a relationship between the general types of recreational activity that delinquents prefer. There appears to be a concensus between these authorities that delinquents tend to prefer more adventurous and exciting types of recreational activities. These authorities suggest that fewer delinquents than non-delinquents have hobbies, and that few delinquents are content with quiet amusements. Ferguson (1963) and others indicate that in many cases delinquent behavior may be a form of a relatively independent recreation. The literature suggests that there are types of recreational activity that some delinquents prefer. The literature does not suggest that lack of recreation is an indicator of delinquency.

The second question asked whether there was a significant difference between youthful felons and non-felons with respect to their experience in independent recreational activities when cross-tabulated by delinquency status and race to one hundred thirteen recreational experience factors.

The third question asked to what extent will responses to one hundred thirteen questionnaire items regarding experience in independent recreational activities differentiate ninety-two non-felons from ninety-two convicted felons with similar characteristics, and if so, in what direction would the difference be.

The answers to these two questions can be summarized here. More detailed data in support of this summary is contained in Chapter III and Appendix C.

General Independent Recreational Areas of Activity

In studying the sample population, twenty general areas of independent recreational activity were selected. Within the twenty general areas of activity, one hundred thirteen specific items of experience were considered.

There were nine areas in which no items differentiated felons from non-felons at the .10 level of significance. Those areas were modeling, record or tape collecting, water skiing, boating, hiking, bicycling and trips, and skating. Eleven of the areas of independent recreational activity did contain specific items which differentiated

felons and non-felons at the .10 level of significance. These areas were photography, stamp and coin collecting, reading, musical instruments, swimming, fishing and hunting, camping, horseback riding and use of transportation.

Those areas of independent recreational activities which failed to differentiate felons and non-felons at the .10 level can be categorized. The categories can be based on the level of participation in the area of activity by the subject sample. Within the study sample responses indicating experience in some areas, record and tape collecting, for example, were almost universal. In this area of activity, and in others which were very popular, the high level of participation by the subjects appears to operate in a manner which makes felons and non-felons more similar than different.

The other category, based on the level of subject participation, is a very low level of participation. Some items on the questionnaire, notably skating, showed that only very few of the subjects participated. In these areas of recreational activity, it seems that again, felons and non-felons are more similar than different.

It was in those general areas of independent recreational activity which appeared less universal in popularity that some specific items differentiated the sub-samples of the study. This finding does not necessarily imply less universality at the level of exposure to the activity. Rather, it indicates that at the levels of increasing expertise within an area of activity, specific items of activity were more likely to differentiate felons and non-felons.

Specific Items of Recreational Activity

Of the one hundred thirteen items of specific recreational activity experience, twenty items differentiated felons and non-felons at the .10 level, while ninety-four did not. The items failing to reach the .10 level included all of the items in nine general areas and some items from the other eleven areas.

The twenty items of specific recreational experience may be placed into two different categories. The first of these categories is that of degree of participation. Instances which appear to illustrate this point also suggest that variety of experience within a general area of activity is indicative of expertise.

Several items of specific recreational experience tend to illustrate that the variety of experience and degree of participation in a recreational activity can serve to differentiate felons and non-felons. These are the developing and printing of pictures, reading about stamp and coin collecting, purchasing proof coins, reading habits in general, number of pieces of music an individual can play and whether he has played in a group, ability to perform three or more swimming strokes and floating for extended periods, capability to swim longer distances, ownership of camping equipment, and having ridden a horse bareback.

The other major category of items which differentiated felons and non-felons could be described as thrill seeking, risk taking, or

adventurous in nature. The items which appear to fall into this category were train riding, motorcycle riding, and hunting and fishing illegally.

The riding of railroad trains as reported by the subjects is difficult to evaluate. During the interviews many of the felon subjects reported that they had ridden trains not as paying passengers, but "on the outside" of the trains. This information suggests that quite possibly, this type of railroad use reflects an adventurous activity, rather than a means of transportation.

Of the twenty specific independent recreational items shown in Tables 7 and 8, experience in motorcycle riding and train riding were reported more frequently by felons than non-felons. One other item showed a remarkable, but probably non-typical tendency in the white sample. The felons, far more frequently than the non-felons (56.7 percent versus 02.7 percent) reported having swum over fifty yards. This great difference produced a chi square value of 23.351, which was significant at the .001 level. The direction of difference was the opposite for the black sample.

Responses to the remainder of the twenty items consistently reflected more experience for the non-felons than the felons.

Conclusion and Recommendations

The data shown in Tables 7 and 8 reveal that at the .05 level of confidence, ten items differentiated felons and non-felons of the

combined sample. Further, the data shows that at that level of confidence the items differentiated the felons and non-felons of one or both races eight times. In these instances the null hypothesis is rejected.

For the twenty items significant at the .10 level, more of the white felons reported experiences of the types described in those items than did the black felons. Moreover, more of the white non-felons reported experiences of those types than did the black non-felons; however, the percentages were not as divergent as for the felons.

These findings suggest that youthful felons, less frequently than youthful non-felons, report experience in the selected items. The findings also suggest that the white subjects have had more experience in independent recreational activity than the blacks.

The general areas and specific items of independent recreational activity which differentiated felons and non-felons have been discussed in this chapter. The direction of the differentiation between felons and non-felons has been discussed as well. The data indicates that for the most part, the activities which are quite popular, and those that are least popular fail to differentiate felons and non-felons. Between these extremes there are items which at a level of expertise beyond mere exposure to the activity, do differentiate felons and non felons.

The felons more often reported experience in adventurous or risk taking activity. The non-felons more frequently reported greater

participation in socially acceptable recreational activities than did the felons.

These matters tend to suggest to the investigator that delinquents and non-delinquents differ in some respects as to what they consider a satisfying experience. Perhaps the majority of youth desire to participate in challenging activities; activities to which are assigned some degree of prestige, and which require a visible or assumed skill or daring to accomplish. These activities could be primarily mental or physical in nature, or both. If this is the case, then possibly the non-delinquent is able to find gratification in more socially acceptable behavior patterns, while the delinquent, searching for gratification, indulges in adventurous, risky activity, including delinquent behavior.

Differential peer group influence may partially account for the phenomenon. Other contributing factors may be mental or physical deficiencies, self perception, and perception of peer group expectations and reactions.

Whatever it is that causes some individuals to find satisfying experiences in acceptable ways, while others do not, it appears that individual preference functions to a large extent. At the outset of this study the investigator assumed that their experiences in independent recreational activities at the exposure level would tend to differentiate felons and non-felons. The study failed to support that assumption. Within the eleven general areas of activity in which

some items differentiated felons and non-felons, it appeared that it was at the higher degrees of participation where the differential was significant.

We recognize that when delinquency causation or control are considered, what is actually being considered is a hierarchy of causative or control factors. To better understand and establish the hierarchical position of independent recreational activity as it is related to delinquency, further studies must be conducted. As a starting point, the investigator recommends that a study should be undertaken to determine what recreational activities delinquents consider to be most appealing and satisfying. Such a study could compare the responses of delinquents with the responses of a non-delinquent control group. If the study included a determination as to why the preferences were held, much insight might be gained which could conceivably be applied to delinquency control programs.

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APPENDIX A

QUESTIONNAIRE MANUSCRIPT

APPENDIX A

Questionnaire Manuscript

PART ONE:

On line A place the name of the last school you attended.

On line B place the name of the town you lived in last.

On line C place your last address, number and street.

Now on line D if the last place you lived has a telephone, mark Number 1; if you had the use of a car, mark Number 2; if you had a driver's license, mark Number 3; if you are a Negro, mark Number 4; if you are white, mark Number 5; if you are of Mexican descent, mark Number 6; if you are not Negro, White or of Mexican descent, mark Number 7; if the last grade you completed in school was the seventh grade or less, mark Number 8; if the last grade you completed was the eighth, mark Number 9; if the last grade you completed was the ninth, mark Number 10; if the last grade you completed was the tenth, mark Number 11; if the last grade you completed was the eleventh, mark Number 12; if the last grade you completed was the twelfth, mark Number 13; if you attended college, mark Number 14.

On line E place your date of birth, date, month, then year.

On line F write what your family's source of income was (what your father's work was).

On line G if you have danced, mark Number 1; if you danced frequently, mark Number 2; if you danced occasionally, mark Number 3; if you were ever a cub scout, mark Number 4; if you were ever a Boy Scout or Explorer, mark Number 5; if your highest scout rating was tenderfoot, mark Number 6; if your highest scout rating was 2d class, mark Number 7; if your highest scout rating was 1st class, mark Number 8; if you are a star scout, mark Number 9; if you are a life scout, mark Number 10; if you are an Eagle scout, mark Number 11.

PART TWO:Line A (Modeling)

- If you built models of airplanes, boats or cars mark No. 1.
- If you have built and operated a gas engine model, mark No. 2.
- If you regularly read magazines about modeling, mark No. 3.
- If you ever belonged to a model club, mark No. 4.

Line B (Photography)

- If you owned a camera, mark No. 1.
- If you have taken pictures, mark No. 2.
- If you have taken color slides, mark No. 3.
- If you have developed negatives, mark No. 4.
- If you have printed pictures, mark No. 5.
- If you read magazines about photography, mark No. 6.
- If you ever belonged to a photography club, mark No. 7.

Line C (Stamps)

- If you ever collected stamps, mark No. 1.
- If you collected American stamps, mark No. 2.
- If you collected foreign stamps, mark No. 3.
- If you purchased new issues of stamps from the post office, mark No. 4.
- If you had over 300 stamps in your collection, mark No. 5.
- If you read articles and magazines about stamp collecting, mark No. 6.
- If you belonged to a club for stamp collectors, mark No. 7.

Line D (Coins)

- If you ever collected coins, mark No. 1.
- If you collected American coins, mark No. 2.
- If you collected foreign coins, mark No. 3.
- If you purchased proof or uncirculated coins from the mint, mark No. 4.
- If you read articles or magazines about coin collecting, mark No. 5.
- If you ever belonged to a club for coin collectors, Mark No. 6.

Line E (Reading)

- If you read less than three magazines each month, mark No. 1.
- If you read more than three magazines each month, mark No. 2.
- If you read less than four books each year, mark No. 3.
- If you read from five to ten books each year, mark No. 4.
- If you read more than ten books each year, mark No. 5.

Line F (Records and Tapes)

- If there was a record or tape player where you lived, mark No. 1.
- If you collected records or tapes, mark No. 2.
- If you had less than ten records or tapes, mark No. 3.
- If you had over ten records or tapes, mark No. 4.

Line G (Musical Instruments)

- If you have played any musical instrument, mark No. 1.
- If you play two or more instruments, mark No. 2.
- If you read music, mark No. 3.
- If you play five tunes or less, mark No. 4.
- If you play more than five tunes, mark No. 5.
- If you ever played in a band or orchestra, mark No. 6.
- If you owned a musical instrument, mark No. 7.

Line H (Swimming)

- If you have swum only 25 yards or less at one time, mark No. 1.
- If you have swum over 50 yards at one time, mark No. 2.
- If you have floated for two minutes, mark No. 3.
- If you have done less than three different strokes, mark No. 4.
- If you have done more than three different strokes, mark No. 5.

Line I (Waterskiing)

- If you have ever waterskied, mark No. 1.
- If you have ever waterskied on one ski, mark No. 2.
- If you ever waterskied for ten minutes without falling, mark No. 3.
- If you ever owned water skis, mark No. 4.

Line J (Boating)

- If you have ever operated any kind of a boat, mark No. 1.
- If you have rowed a boat, mark No. 2.
- If you have ever paddled a canoe, mark No. 3.
- If you have ever sailed a sail boat, mark No. 4.
- If you have ever operated a motor boat, mark No. 5.
- If you have ever owned, borrowed, or rented a boat, mark No. 6.

Line K (Fishing)

- If you have ever fished, mark No. 1.
- If you ever owned a rod and reel, mark No. 2.
- If you have fished in a lake or pond, mark No. 3.
- If you have fished in a stream or river, mark No. 4.
- If you have fished in salt water, mark No. 5.
- If you ever fished from a boat, mark No. 6.
- If you ever had a fishing license, mark No. 7.
- If you ever cleaned a fish, mark No. 8.

Line L (Hunting)

- If you have ever hunted, mark No. 1.
- If you ever had a hunting license, mark No. 2.
- If you ever owned a hunting firearm, mark No. 3.
- If you ever hunted big game, mark No. 4.
- If you ever hunted small game, mark No. 5.
- If you ever hunted birds, mark No. 6.
- If you ever hunted varmints, mark No. 7.
- If you ever skinned and cleaned an animal or bird, mark No. 8.

Line M (Hiking)

- If you ever hiked more than ten miles at one time, mark No. 1.
- If you have ever hiked over 20 miles in one day, mark No. 2.
- If you have gone on hikes which required staying out overnight, mark No. 3.
- If you have carried camp gear and food for as many as four meals on a hike, mark No. 4.
- If you have hiked cross-country using a map and compass for direction, mark No. 5.

Line N (Camping)

- If you have ever gone camping, mark No. 1.
- If you ever camped out three nights in a row, mark No. 2.
- If you have camped out in foul weather, mark No. 3.
- If you have camped out in primitive campsites, mark No. 4.
- If you have ever prepared a meal in camp, mark No. 5.
- If you have ever camped out as a member of a group, mark No. 6.
- If you ever owned a tent or sleeping bag, mark No. 7.

Line O (Horseback Riding)

- If you have ever ridden a horse, mark No. 1.
- If you have ever saddled and bridled a horse, mark No. 2.
- If you have ever ridden bareback, mark No. 3.
- If you have ever ridden ten miles at one time, mark No. 4.
- If you have ever ridden as a member of a group, mark No. 5.

Line P (Bicycling)

- If you have ever ridden a bicycle, mark No. 1.
- If you ever owned a bicycle, mark No. 2.
- If you ever rode a bicycle with three or more speeds, mark No. 3.
- If you ever rode a bicycle more than 10 miles at a time, mark No. 4.
- If you have ever ridden a bicycle 50 miles in one day, mark No. 5.
- If you have gone on a bicycle trip as a member of a group, mark No. 6.

Line Q (Skating)

- If you have ever roller skated, mark No. 1.
- If you have ever ice skated, mark No. 2.
- If you have skated less than five different times, mark No. 3.
- If you have skated more than five different times, mark No. 4.
- If you ever owned a pair of skates, mark No. 5.

Line R (Public Institutions)

- If in the last three years you have visited a city zoo, mark No. 1.
- If in the last three years you have visited a library, mark No. 2.
- If in the last three years you have visited a museum, mark No. 3.
- If in the last three years you have visited a state or national park, mark No. 4.
- If in the last three years you have visited the Astrodome, mark No. 5.

Line S (Transportation)

- If you have ever ridden a train, mark No. 1.
- If you have ever ridden a highway bus, mark No. 2.
- If you have ever ridden in an airplane, mark No. 3.
- If you have ever ridden a motorcycle, mark No. 4.

Line T (Trips)

- If you have been in two or more different states, mark No. 1.
- If you have been to Mexico, mark No. 2.
- If you have been in a foreign country besides Mexico, mark No. 3.
- If you have been to San Antonio, mark No. 4.
- If you have ever been to Dallas or Fort Worth, mark No. 5.

APPENDIX B

QUESTIONNAIRE RESPONSE SHEET

APPENDIX B

Questionnaire Response Sheet

PART I:

Line A _____ Line B _____

Line C _____

Line D (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14)

Line E _____ Line F _____

Line G (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)

PART II:

Line A (1) (2) (3) (4)

Line M (1) (2) (3) (4) (5)

Line B (1) (2) (3) (4) (5) (6) (7)

Line N (1) (2) (3) (4) (5) (6) (7)

Line C (1) (2) (3) (4) (5) (6) (7)

Line O (1) (2) (3) (4) (5)

Line D (1) (2) (3) (4) (5) (6)

Line P (1) (2) (3) (4) (5) (6)

Line E (1) (2) (3) (4) (5)

Line Q (1) (2) (3) (4) (5)

Line F (1) (2) (3) (4)

Line R (1) (2) (3) (4) (5)

Line G (1) (2) (3) (4) (5) (6) (7)

Line S (1) (2) (3) (4)

Line H (1) (2) (3) (4) (5)

Line T (1) (2) (3) (4) (5)

Line I (1) (2) (3) (4)

Line J (1) (2) (3) (4) (5) (6)

Line K (1) (2) (3) (4) (5) (6) (7) (8)

Line L (1) (2) (3) (4) (5) (6) (7) (8)

APPENDIX C

RAW DATA FROM QUESTIONNAIRE RESPONSES

APPENDIX C

Raw Data From Questionnaire Responses

Table 9 shows the number of positive responses to questionnaire items by race and felon category. Positive responses only are shown for each of the questionnaire items designed to inventory independent recreational experience.

TABLE 9
Positive Responses to Questionnaire Items

Item	White		Black	
	Felon	Non-Felon	Felon	Non-Felon
Built Models	31	31	26	28
Built and operated powered models	9	8	5	6
Read magazine articles about modeling	5	7	2	2
Belonged to model club	0	1	1	3
Owned a camera	32	33	42	46
Took pictures	35	36	43	48
Took color slides	13	17	22	29
Developed negatives	3	8	3	6
Printed pictures	3	8	2	6
Read about photography	3	7	12	17
Belonged to photography club	0	1	2	3
Collected stamps	5	8	5	9
Collected U.S. stamps	5	8	6	9
Collected foreign stamps	4	5	1	2
Purchased new issues	3	5	3	6
Collected over 300 stamps	3	5	3	6
Read articles about stamp collecting	3	7	5	11
Belonged to club for stamp collectors	0	1	0	0

TABLE 9--Continued

Item	White		Black	
	Felon	Non-Felon	Felon	Non-Felon
Collected Coins	16	19	14	21
Collected U.S. coins	15	17	12	16
Collected foreign coins	7	9	7	7
Purchased proof or uncirculated coins	6	11	13	19
Read articles about coin collecting	10	18	13	19
Belonged to coin club	1	2	0	0
Read less than three magazines monthly	16	12	29	16
Read more than three magazines monthly	21	25	26	39
Read less than four books monthly	13	10	20	9
Read five to ten books annually	14	14	17	22
Read more than ten books annually	10	13	18	24
Had use of record or tape player	37	35	51	50
Collected records or tapes	36	34	48	47
Had less than ten records or tapes	1	0	1	0
Had more than ten records or tapes	35	35	47	47
Has played a musical instrument	20	22	20	27
Has played two or more instruments	8	7	8	11
Reads music	8	7	13	17
Has played five or fewer tunes	4	5	9	7
Played more than five tunes	16	17	11	20
Played with band or orchestra	12	16	14	22
Owned an instrument	21	22	18	23

TABLE 9--Continued

Item	White		Black	
	Felon	Non-Felon	Felon	Non-Felon
Has swum only 25 yards or less	5	5	14	11
Has swum over 50 yards	21	1	8	13
Has floated for two minutes	28	32	35	45
Has done only three strokes or less	9	7	18	11
Has done more than three different strokes	28	30	37	44
Has waterskied	16	19	3	4
Has skied with only one ski	7	9	1	2
Has skied ten minutes or more	6	13	1	1
Owned water skis	9	10	1	2
Operated a boat	34	36	25	31
Rowed a boat	32	33	25	30
Paddled a canoe	19	21	9	11
Sailed a boat	8	10	4	8
Operated a motor boat	29	31	13	16
Owned or rented a boat	27	29	14	19
Has fished	37	37	51	50
Owned a rod and reel	34	30	39	39
Fished in lakes or ponds	37	35	48	48
Fished in streams or rivers	37	36	40	42
Fished in salt water	35	36	44	44
Fished from a boat	26	34	36	27
Had a fishing license	31	27	10	16
Cleaned fish	35	36	48	49
Has hunted	34	36	44	47
Had hunting license	19	27	10	17
Owned hunting firearm	31	33	24	26
Hunted big game	24	26	13	14
Hunted small game	34	35	40	42
Hunted birds	33	33	38	41
Hunted varmints	26	25	27	24
Dressed an animal or bird	32	34	44	48

TABLE 9--Continued

Item	White		Black	
	Felon	Non-Felon	Felon	Non-Felon
Hiked more than ten miles	18	21	14	17
Hiked more than 20 miles in one day	8	11	9	12
Hiked and stayed out overnight	14	18	17	19
Carried camp gear and food	14	18	13	16
Hiked cross-country with map and compass	7	9	7	9
Has gone camping	36	36	31	36
Camped out three nights consecutively	32	31	18	22
Camped out in foul weather	29	31	11	16
Camped in primitive campsite	24	26	8	12
Prepared a meal in camp	28	30	24	28
Camped as member of a group	30	31	22	26
Owned tent or sleeping bag	28	31	19	28
Has ridden a horse	37	36	51	50
Saddled and bridled horse	23	26	29	34
Rode bareback	19	22	36	41
Rode 10 or more miles in one day	16	21	19	26
Rode as part of a group	12	16	21	27
Rode a bicycle	37	36	55	53
Owned a bicycle	37	36	55	53
Rode a bicycle with 3 or more speeds	36	34	53	51
Rode a bicycle at least ten miles	28	31	31	36
Rode 50 or more miles in one day	7	9	11	17
Gone on bike trip with a group	17	21	22	29
Has roller skated	34	35	36	36
Has ice skated	12	14	8	13
Has skated less than five times	6	4	13	11
Has skated more than five times	28	31	22	25
Owned skates	24	28	26	29

TABLE 9--Continued

Item	White		Black	
	Felon	Non-Felon	Felon	Non-Felon
Visited a city zoo	35	36	48	47
Visited a public library	20	24	38	44
Visited a museum	18	21	38	43
Visited a state or national park	35	35	36	38
Visited Astrodome	29	32	51	50
Has ridden a train	30	24	33	27
Has ridden highway bus	33	34	47	50
Has ridden airplane	27	29	19	24
Has ridden motorcycle	37	28	39	21
Has been in two or more states	36	36	39	41
Has been to Mexico	25	26	28	29
Has been to foreign country other than Mexico	13	12	5	6
Has been to San Antonio	30	31	36	39
Has been to Dallas or Fort Worth	31	31	34	41

APPENDIX D
CRIMINAL DATA PERTAINING TO THE
FELON STUDY SAMPLE

APPENDIX D

CRIMINAL DATA PERTAINING TO THE

FELON STUDY SAMPLE

The following data concerns the criminal behavior of the felon study sample. The bulk of this data were extracted from prisoner summary documents stored at the Administration Center, Texas Department of Corrections. Information pertinent to the amount of time the subjects were incarcerated in jails was supplied by the subjects themselves.

Table 10 shows that the black subjects tended to commit offenses more violent in nature than did the white subjects. Other notable differences in the violation patterns between the races suggest that burglary and drug offenses were predominantly offenses committed by white subjects. Black subjects committed considerably more thefts over Fifty Dollars than did the white subjects.

The thirty-seven white subjects were convicted of ninety-six felony offenses. The fifty-five black subjects were convicted of one hundred sixteen felony offenses. There were a total of two hundred twelve felony convictions among the ninety-two subjects. Four white subjects and one black subject was incarcerated solely for drug offenses.

Data concerning the court experience of the felon subjects reflected in Table 11, indicates that many of their offenses were

committed with others. Sixty-eight of ninety-two subjects were tried with co-defendants.

TABLE 10
FELONIES COMMITTED AND NUMBER
OF CONVICTIONS, BY RACE

Offense	White (N=37)	Black (N=55)	Total (N=92)
Unknown ^a	7	9	16
Murder	0	5	5
Rape	0	3	3
Robbery	22	35	57
Assault	2	2	4
Burglary	27	17	44
Theft over \$50	17	37	54
Auto Theft	0	1	1
Forgery	1	2	3
Fraud	0	2	2
Sex Offense	1	0	1
Drugs	17	2	19
Breaking and Entering a Motor Vehicle	2	1	3

^aUnknown indicates a known felony conviction, the type of which was not recorded at the Texas Department of Corrections.

This table also shows that those subjects which had been on probation previously tended to have been on adult more often than on juvenile probation. Only nine of ninety-two subjects had detainers lodged against them

TABLE 11
 COURT DATA CONCERNING THE
 FELON SAMPLE, BY RACE

	White (N=37)	Black (N=55)	Total (N=92)
Tried with co-defendants	29	39	68
Number of co-defendants	57	72	129
Previous adult probation	17	27	44
Previous juvenile probation	9	4	13
Detainers imposed	3	6	9

Incarceration data for the felon sample is shown in Table 12. The data shows that the black subjects were slightly less likely than

TABLE 12
 INCARCERATION DATA FOR
 THE FELON SAMPLE

	White (N=37)	Black (N=55)	Total (N=92)
Served time in jail	35	43	78
Time served in jail	193 mos.	292 mos.	485 mos.
Current maximum sentence	229 yrs.	642 yrs.	871 yrs.
Number confined in solitary	6	22	28
Times in solitary confinement	8	32	40

the white subjects to have experienced jail incarceration. The data also shows that black subjects were more likely than the whites to have

received penal institutional punishment in the form of solitary confinement. The twenty-eight inmates punished by imposition of solitary confinement had had the punishment imposed forty times. Two subjects, both white, had attempted escapes.

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