

Utah State University

DigitalCommons@USU

All Graduate Theses and Dissertations

Graduate Studies

5-1976

Role Theory Considered as an Influence on Criminal and Deviant Behavior in the Utah State Park System -- A Manager Problem

Gerald R. Grove
Utah State University

Follow this and additional works at: <https://digitalcommons.usu.edu/etd>



Part of the [Life Sciences Commons](#)

Recommended Citation

Grove, Gerald R., "Role Theory Considered as an Influence on Criminal and Deviant Behavior in the Utah State Park System -- A Manager Problem" (1976). *All Graduate Theses and Dissertations*. 3153.

<https://digitalcommons.usu.edu/etd/3153>

This Thesis is brought to you for free and open access by the Graduate Studies at DigitalCommons@USU. It has been accepted for inclusion in All Graduate Theses and Dissertations by an authorized administrator of DigitalCommons@USU. For more information, please contact digitalcommons@usu.edu.



ROLE THEORY CONSIDERED AS AN INFLUENCE
ON CRIMINAL AND DEVIANT BEHAVIOR
IN THE UTAH STATE PARK SYSTEM --
A MANAGER PROBLEM

by

Gerald R. Grove, Jr.

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Forestry and Outdoor Recreation

(Outdoor Recreation)

Approve:



UTAH STATE UNIVERSITY
Logan, Utah

1976

ACKNOWLEDGMENTS

I wish to offer my thanks and appreciation to my graduate committee for their efforts in assisting me to complete this thesis. Dr. McCool's extensive readings of the manuscript and his many suggestions were of great value in completing the work. The counsel and instruction of Dr. Musick, Mr. Royer and Dr. Pamela Riley were also extremely helpful.

I offer special thanks to my wife, Donna, for her moral and financial help during my education, as well as assisting in typing the rough drafts of this thesis.

Gerald R. Grove, Jr.

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	ii
LIST OF TABLES	v
LIST OF FIGURES	vii
ABSTRACT	viii
Chapter	
I. CRIMINAL AND DEVIANT BEHAVIOR: A PUBLIC PARK PROBLEM	1
Introduction	1
Definition of the Problem	2
Study Objective	6
Hypotheses	7
II. ROLE BEHAVIOR AS IT RELATES TO CRIMINAL AND DEVIANT CONDUCT ON OUTDOOR RECREATION RESERVES	8
Introduction	8
Review of Role Theory	8
Role Theory Considered as an Influence on Depreciative Behavior in Wildland Situations with Hypothesized Explanations from Literature	11
Summary	13
III. METHOD OF MEASUREMENT UTILIZED IN THE STUDY	15
The Questionnaire	15
Validity	16
Reliability	22
Description of the Study Area	24
Sampling Design	27
IV. ANALYSIS OF DATA	31
Introduction	31
Social-Demographic Scale	31
Camping Patterns and Preferences	35
Attitudes, Knowledge and Perceptions	37
Summary	40

TABLE OF CONTENTS (Continued)

	Page
V. STATISTICAL TESTS AND COMPARISONS OF THE SAMPLE DATA	42
VI. A DISCUSSION OF THE HYPOTHESIS TESTING RESULTS AND THEIR IMPLICATIONS	50
Conclusion and Implications	51
Recommendations for Creating Acceptable Recreation Behavior	53
BIBLIOGRAPHY	57
APPENDIXES	59
Appendix A. Attitudes and Knowledge Questionnaire	59
Appendix B. Questionnaire Response Frequencies in Percentages	65
VITA	70

LIST OF TABLES

Table	Page
1. The size of community in which the major portion of the respondents' youth was spent, East Canyon Law Enforcement Study, 1974	32
2. Occupations given by the respondents, East Canyon Law Enforcement Study, 1974	33
3. Age class of respondents, East Canyon Law Enforcement Study, 1974	34
4. Level of education reported by respondents, East Canyon Law Enforcement Study, 1974	35
5. Type of group which respondent visiting the park reported he was with, East Canyon Law Enforcement Study, 1974	36
6. Type of company respondents preferred when visiting parks or campgrounds, East Canyon Law Enforcement Study, 1974	36
7. Size of group preferred by respondents when visiting parks and campgrounds, East Canyon Law Enforcement Study, 1974	37
8. Number of visits respondents reported making during the past year to state and federal parks and campgrounds, East Canyon Law Enforcement Study, 1974	37
9. Law enforcement attitude scores totaled from the law enforcement section of the questionnaire, East Canyon Law Enforcement Study, 1974	38
10. Perception of camper role scores totaled from the camper role section of the questionnaire, East Canyon Law Enforcement Study, 1974	39
11. The total number of correct responses made by individuals on the rules knowledge section of the questionnaire, East Canyon Law Enforcement Study, 1974	40
12. Correlation coefficients resulting when law enforcement attitude and camper role skills perception scores are controlled for, East Canyon Law Enforcement Study, 1974	44

LIST OF TABLES (Continued)

Table	Page
13. Correlation coefficients resulting when law enforcement attitude and knowledge of park and campground rules scores are compared with intervening variables controlled for, East Canyon Law Enforcement Study, 1974	46
14. Correlation coefficients resulting when camper role skill perceptions and knowledge of park and campground rules scores are compared with intervening variables controlled for, East Canyon Law Enforcement Study, 1974	48
15. State Park Law Enforcement Attitude Survey frequency response table (in percentages)	66

LIST OF FIGURES

Figure	Page
1. East Canyon State Park marina area	26
2. East Canyon State Park as divided into areas for purposes of the study	29

ABSTRACT

Role Theory Considered as an Influence
on Criminal and Deviant Behavior
in the Utah State Park System --
A Manager Problem

by

Gerald R. Grove, Jr., Master of Science

Utah State University, 1976

Major Professor: Dr. Stephen F. McCool
Department: Outdoor Recreation

Individual attitudes toward law enforcement and perceptions of camper role skills, along with a knowledge of park and campground rules, were measured with a questionnaire and compared through Partial Correlation and Pearson Product-Moment Correlations. Demographic information was also gathered and compared with the attitude and rules knowledge data for significance.

Results showed that attitude toward law enforcement and attitude toward camper role skills are significantly related. Attitude toward law enforcement and knowledge of rules also proved to have a significant relationship. However, attitude toward camper role skills had no statistical relationship to rules knowledge. The demographic data was found to be related only to attitude toward law enforcement and then only in two cases: age and education.

(73 pages)

CHAPTER I
CRIMINAL AND DEVIANT BEHAVIOR:
A PUBLIC PARK PROBLEM

Introduction

Behavior which can be defined as criminal and/or deviant has become a large-scale problem for recreation area managers. People who are temporarily leaving urban complexes to find freedom in the outdoors are creating problems in the often crowded parks and campgrounds which are similar to those they attempted to leave behind in the cities. Criminal and deviant behavior are social enigmas; and as the numbers of visitors increase in otherwise serene rural areas, so will the incidence of deviant behavior increase.

As will later be documented, criminal and deviant behavior was originally a minor problem in outdoor recreation areas and has only recently grown to the proportion found in urban areas. The magnitude of antisocial behavior in parks and campgrounds adds tremendously to the managerial workload. Besides their regular work, the staff has to repair vandalized property, enforce rules and laws, handle complaints, and investigate crimes. This means added costs both monetarily and time-wise to the agencies involved. In addition, the fact that personnel must enforce laws places an even greater burden on the already over-worked judicial and legislative systems.

Definition of the Problem

There is no question that park visitation has increased amazingly. Clawson (1974) states that in many parks attendance has grown 10 percent annually over many years. That rate is more than five times the rate of population increase. "If there has been a 'population explosion,' there has been a recreation explosion five times as violent."

D. J. Essex (1971) has stated:

Law enforcement problems over the National Park System as a whole have increased astronomically during the past five years. The increase in felonies in the National Parks has exceeded the nationwide average each year since 1965. (p. 39)

The recent impact has not been felt on reserved park and forest recreation areas alone. The following statement was found in an appendix to the Bureau of Land Management Plan for the California Desert Program (1968):

. . . in 1968--enough of the (visitors) went to the California Desert to add up to five million visitors days of recreation use. . . . a substantial number of visitors took their anti-social attitudes from the city to the desert. . . . there were an estimated 490 major crimes such as larceny, aggravated assaults, narcotics violations, car clouts (thefts) and robberies. There were also an estimated 1,280 lesser offenses against people and property. (p. 2)

Vandalism in the parks is essentially a crime against government property. Signs, garbage cans, water tanks and structures are shot full of holes. Outhouses and other buildings are torn apart or blown up. Historic artifacts are destroyed or damaged or the landscape is ravaged.

Reynolds (1967) cites the growing maintenance workload and the increases in manpower and costs necessary to meet the growth in public disregard, vandalism and littering. In some areas outhouses are built like military bunkers to withstand the onslaught of destructive users.

Because of the huge increase in park area crime,

The traditional ranger in many areas today is primarily a lawman; he must fill the role of beat officer, game warden, and narcotics and homicide detective. During the past summer, rangers dealt with group confrontations and disturbances in Yosemite, an invasion of outlaw motorcyclists in the Black Hills, dope pushing in numerous park campgrounds, and a summer crime rate in Yosemite which equalled that of a city of 70,000 people. (D. J. Essex, 1971, p. 41)

The role of the traditional park ranger is increasingly becoming oriented toward that of a Law Enforcement Officer.

This study was conducted in the State of Utah; although it has few if any unique law enforcement situations in its parks and campgrounds, it does have a growing enforcement problem and a Division of Parks and Recreation which is attempting to improve the future outlook for outdoor recreation in the State. It is very difficult to catch individuals in the act of crimes such as vandalism or destruction of property. Because of this, not many people are cited or arrested for the crime. Only obvious cases can be prosecuted. (The driving under the influence with accident case also involved destruction of park property.) Littering is another misdemeanor for which it is difficult to cite a person. Ordinarily, most citations are for traffic offenses or violations which are easily observed and which are difficult for the violator to conceal.

Clark, Hendee and Campbell (1968) indicated that many visitors to public parks believed that upon leaving the structured environments of urban areas and retiring to a public campground, crime was left behind in the cities. Unfortunately, although many people still believe this to be the case, it no longer proves to be true. With the tremendous increase recently in usage that our National, State and Forest Parks

and Campgrounds have seen, the rates of crime have also grown.

Clark, Hendee and Campbell (1971b) attempted to define the motives for criminal and destructive acts in parks and forest recreation areas. After a summer of studies conducted in campgrounds, they arrived at the conclusion that most large value thefts are performed by individuals who go to the campgrounds especially for the purpose of stealing. Smaller value and camping items are mainly stolen by juveniles who come for the night or weekend and neglect to bring camping equipment. Vandalism is usually caused by noncampers who either come to the area to vandalize or with no particular purpose in mind. It appears that many people travel to a campground seeking freedom that cannot be found in urban centers and often thoughtlessly cause damage. Clark, Hendee and Campbell (1968, p. 31) cite the example of a mother who, upon arriving at a campground, turned her two early-teenage boys loose with no supervision. They vandalized outhouses, trees and signs, bothered other campers, and became lost overnight. But when a ranger suggested that their energy would be put to better use picking up litter, they enthusiastically began cleaning the grounds and caused no more trouble. Unthinking adults cause destruction or problems through (1) ignorance of the rules, (2) ignoring the rules for convenience, or (3) because the rules may interfere with fun they have planned.

The fact that a great many violators fall in the latter category creates a major problem for the manager of the public park. The visitor who comes to the park and willfully commits a crime can be dealt with as a criminal, and specific measures may be taken locally to decrease this type of crime. However, when the violation results from insufficient knowledge of laws or rules, vagueness or a lack of

specificity in the rules, inappropriate behavior on the part of the visitor, or lack of understanding of recreation rules, then the action to be taken against the violator becomes uncertain. Actions taken by a specific ranger or the management should be oriented to determining the cause behind violations and developing appropriate information and enforcement programs.

(Clark, Hendee and Campbell (1968, p. 55) have recommended three possibilities which may prove effective in improving law enforcement in the parks:

1. Strengthen the police powers of the park authorities.
2. More extensive social and educational contacts between rangers and the public.
3. Individual campers must help police the parks by reporting offenders and chastizing violators.

(Creating new laws and strengthening the powers of park authorities may possibly help in the fight against premeditated crime. These alternatives may, however, be of little value in lowering the rate of rule violation when the culprit may be simply ignorant of the rules, impulsively violating them because he vaguely comprehends their purpose or because they may stand in the way of an immediate goal. More extensive contacts between the park ranger and visitors and programs directed at educating the visiting public may prove of greater value.)

Study Objectives

Cone (1972, p. 83) points out several concepts which must be kept in mind in any new approaches to the law enforcement problem.

1. Rangers must understand the laws and rules which they enforce and should be goal oriented in their enforcement procedures. Contacts

and actions directed toward the public should have a specific constructive purpose in mind.

2. Programs must be designed which will sell law enforcement to the public so that they understand the concept and purpose of enforcement and develop a positive attitude toward it.

3. Visitors to the parks must be made responsible for their actions and attitudes and they must be educated as to what is expected of them while visiting the parks.

Cone is realistically evaluating the problem. But in order to properly initiate programs which entail these procedures, administrators first need to understand the motives of park visitors. Why do individuals visit the parks? What do they expect of the parks once they are there, and how do the rules restrict or meet their expectations? Do they know the laws and rules which will govern their behavior and if so do they understand them? Will the individual adhere to the rules or will he tend to avoid them if they limit him from attaining what he seeks in the park? Knowledge of human motives is important to the park manager, and many of these questions have been touched upon in other studies. This study will attempt to demonstrate how the camper's perception of his role as a camper, his knowledge of park and campground rules, and various demographic factors such as age, education, type group he is with, etc. affect his attitude toward law enforcement in outdoor recreation areas.

Hypotheses

The following hypotheses will be tested through this study:

Hypothesis One: Respondents with pro-law enforcement attitudes will exhibit traditional (conservative) camper role skill perceptions.

Hypothesis Two: Respondents with pro-law enforcement attitudes will tend to have a high knowledge of park and campground rules.

Hypothesis Three: Respondents with conservative camper role skill perceptions will tend to have a high knowledge of park and campground rules.

Hypothesis Four: The intervening variables measured in the demographic section of the questionnaire may have a significant effect on the individual's attitude toward law enforcement.

CHAPTER II
ROLE BEHAVIOR AS IT RELATES TO CRIMINAL AND DEVIANT
CONDUCT ON OUTDOOR RECREATION RESERVES

Introduction

Role theory is that aspect of the social and psychological sciences which attempts to explain or define human behavior in terms of actions which are expected and required of individuals by society. A person who is acting out his role in life is normally doing, according to Middlebrook (1974), what he is "supposed to do." Role theory is often described by comparing it to the theatre: "The role analyst is concerned with describing and understanding some of the same complex aspects of human behavior about which dramatists, novelists, journalists and historians write." (Biddle and Thomas, 1966, p. 3)

Review of Role Theory

The theory of role behavior is based upon the premise that society establishes certain norms, status positions and values. Norms are patterns of behavior which social groups accept and expect to occur in certain situations; status positions are offices of influence or control in a social group based upon expertise or group acceptance; values are a measure of worth of desirability that society places on traits, actions, qualities and items which it deems necessary or worthwhile. Through norms, status positions and values, society makes demands of the individual with which it expects him to comply. It is expected that people will conform to norms which are standards throughout a culture or established locally, or even norms which a group or culture create due to the

needs of the moment. Societies generally demand that their members respect the status power invested in individuals or groups. The values which people adopt are often those of the culture they live in, an organization they esteem, or one whose ideals they accept whether through admiration or forced compliance. Biddle and Thomas (19-6, p. 4) state that the requirements for performance within each role are: ". . . determined by social norms, demands and rules; by the performance of others in their respective positions; by those who observe and react to the performance; . . ." They do, however, give the individual a certain amount of autonomy in choosing his own role as they further state, ". . . and by the individual's particular capabilities and personality."

Sarbin and Allen (1968, p. 498) define role expectations as:

. . . collections of cognitions--beliefs, subjective probabilities and elements of knowledge--which specify in relation to complementary roles the rights and duties, and appropriate conduct for a person occupying a certain position. . . . Not only is the occupant of a position expected to perform certain acts and not others; he is also expected to perform actions in specified ways--that is a qualitative component is indicated.

As an example, in most societies a doctor normally occupies a relatively high status position. He is respected and rewarded for his knowledge and abilities and in return society outlines various norms which are expected of his role. He is counted upon to show compassion for suffering, to care for and cure those who are ill, and to expand his and society's knowledge and capabilities in the fields of curative and exploratory medicine. When the doctor returns home he may assume the roles of husband and father. He is probably expected to take out the trash, play games with the children, and in general interact in the normal household routines. When the doctor takes his family camping, he will continue to enact certain roles which were required of him

at home and perhaps even some of his professional roles. In the park or campground, just as at home or at work, norms and values will guide his behavior. If he belongs to a nature or conservation organization, he may very well behave in a manner which reflects the purposes and guidelines of that group. He may watch birds and other animals and teach his family to do the same. In this way he is familiarizing them with aspects of one of his own roles and they are learning the values and norms associated with it. If one of the values of a group is to maintain a clean and natural environment, the family may at times make excursions with trash bags and gather litter. Other people may prefer boating, motorcycling, relaxing or socializing. Whatever activities the individuals engage in, they are most likely following values and norms which were learned through group interaction, either in organizations, clubs, families or peer groups.

Andrews and Karlins (1972, p. 7) paraphrase Skinner's explanations of the manner in which society and social units reinforce and maintain role behavior:

Skinner has frequently pointed out how people living together in groups consciously and unconsciously control each other's actions. When an individual behaves in a fashion approved by the group, he receives admiration, approval, affection and many other reinforcements that increase the likelihood that he will continue to behave in the same fashion. Similarly, when he behaves in a disapproved fashion or manner, rewards are withdrawn or punishment is applied. Dissenters and nonconformists are not "free" of control; they have simply internalized a divergent program of attitudes and response as a consequence of peculiar childhood and adolescent experiences.

By applying controls which reflect approval and disapproval, society maintains behavior which it feels is conducive to its best interests.

Role Theory Considered as an Influence on Depreciative
Behavior in Wildland Situations with Hypothesized
Explanations from Literature

The actions of the park visitor will often be directly affected by the values and norms he has learned and those he is referencing his behavior to in a specified social situation (such as camping). The visitor who belongs to an organization which places great value on maintaining social or natural order would most likely already be familiar with the majority of rules in effect on parks and campgrounds, and if he weren't he would probably attempt to familiarize himself with them upon arriving in an area which was new to him. The same would probably be true, though possibly to a lesser degree, if he simply admired the ideals which these organizations teach. This individual would be prepared to reward actions of his family which were in keeping with his values and norms and would punish them if they were to act in a manner contrary to his ideals. If he were camping with his organization or group, he would likely react the same way toward actions of other members.

In contrast, the individual who does not have the high ideals of such an organization may act very differently. Some individuals or groups of this kind may, through minor or gross violations, annoy others in the area, destroy property, or even commit major crimes. He, and when not alone, his group, may not be disturbed by his actions and possibly won't even realize that he has violated rules.

In a study of deviance and vandalism in campgrounds, Clark, Hendee and Campbell (1971b) cited instances of destructive and deviant behavior occurring because of ignorance of rules, for personal convenience, for

entertainment, for malicious reasons, or because observing the rules may have interfered with fun which they had planned.

Most behavior which violates the rules will probably occur because of not knowing the rules or for the sake of convenience, as would occur if the doctor wished to take his family swimming but found the beach too rocky or muddy and not seeing or ignoring signs which prohibit it, led his family to the boat launching ramp or boat dock to swim. Without knowing the individual personally, it is difficult to classify such minor violations as role related behavior. Turner (1972, p. 308) states that in some cases, ". . . the term deviance should refer to a role rather than to behavior thought to violate a single norm." The youths who enter the recreation area to spend the night and bring no equipment, but instead plan on stealing it are most likely enacting a role. These individuals know the law as it pertains to their behavior and in the group setting tend to reinforce each other's actions within their roles. Middlebrook (1974, p. 294) states that certain types of groups can bring about socially disapproved behavior because of a feeling of anonymity which the individual finds in many group situations.

It appears that both deviant behavior and role behavior is generally learned and maintained through group interaction, while most deviant behavior is not role related and occurs impulsively either in group situations where one is anonymous or to meet short-term goals related to fun or convenience.

Clark, Hendee and Campbell (1968, p. 55) recommend control of depreciative behavior through better communication of rules, programs which educate the public as to the consequences of violations, and stricter enforcement of rules. This would appear to indicate that individuals

who had constructed roles which included awareness of understanding of rules and the consequences of violations would make better park visitors. However, it is highly conceivable that both the teenager who is going to steal camping equipment and who may be planning mischief within the park and the member of the group who is cleaning the camping area both know the laws and rules and the consequences of their actions, and in both cases the group they are accompanying probably has a great influence upon their actions. In the case of the teenagers, probably only preventing their entry into the park or the intervention of authority into their actions will affect their behavior at this point. Clark, Hendee and Campbell's recommendations would most likely have the greatest affect upon their behavior and upon the individual who enters the park with the idea that he is completely free here as opposed to the controls which are imposed upon him in his former social environment. This is the individual who feels that the rules and restrictions interfere with plans he has in mind, and he probably does not understand entirely the purposes for the restrictions which he is disregarding.

Summary

Knowledge of role types and the way in which roles develop could prove valuable to park and campground management. By gaining a general idea of the type of people entering the park and the forces and motivations which have shaped their various roles and personalities, the manager could develop an overall indication of where and how specific types of problems may arise and how he could best combat them. This would not only include direct intervention within the park, but also community programs undertaken outside the park to educate the public to

their responsibilities upon entering the recreation area. Education programs such as those recommended by Clark, Hendee and Campbell would be worthwhile in combatting crime and deviant behavior, but possibly a program designed to develop attitude and personality changes which would be more conducive to harmonious recreation experiences for everyone participating could be of greater value. A scheme of this sort would call for a larger and more far reaching program than that of simply educating the public. The mass media and supportive organizations such as conservation and outdoor groups would have to be used to a much greater degree. Youth groups would be one of the major segments of society to be contacted. A more positive attitude toward social and environmental aspects of outdoor recreation instilled in youth may insure a lesser degree of criminal and deviant behavior in parks and campgrounds of the future.

In general, it is obvious from the literature cited in this chapter that socially developed roles have at least some influence on depreciative behavior in wildland situations. A goal of this study is to determine the degree of the relationship, what effect certain variables may have on the relationship, and what recommendations may be made in regard to preventing further depreciative behavior.

CHAPTER III
METHOD OF MEASUREMENT UTILIZED
IN THE STUDY

The Questionnaire

The purpose of the study is to establish whether or not a relationship exists between the role developed aspects of personality--the aspects developed through group interaction--and criminal and deviant behavior in the Utah State Park System. In order to collect data relevant to the study, a questionnaire (Appendix A) was developed which gathered information from the respondent in several areas related to attitudes toward and knowledge of park and campground rules and regulations. The areas covered by the questionnaire are: attitude toward law enforcement, perception of camper role behavior, knowledge of general park and campground rules, and a section which collects general demographic information.

The first part of the instrument consists of 20 statements designed to establish the respondent's attitude toward law enforcement as it is presently administered in the State Park System. They vary from statements of laws presently enforced to measuring attitudes toward rangers' law enforcement duties.

The second section is made up of statements related to the manner in which the respondent believes a good camper should behave. In both the first and second sections the subject responded to the statements through a modified Likert Scale. The selections available to the respondent are: strongly agree, agree, undecided, disagree and strongly dis-

agree. Allport (1967) points out that all attitudes are either positive or negative and develop on a continuum between the two poles. The questionnaire is designed to ascertain at which point along this continuum the respondent stands on each statement.

The third portion consists of 10 rules which either are or are not enforced in parks and campgrounds. Choices of rules used in the questionnaire are generally ones which apply to all recreation areas. Answers on this section are made through a simple "yes" or "no" response.

The fourth section contains 13 questions regarding information of a demographic nature: group type, education, age, sex, occupation, group type preferred and place of residence.

The instrument is designed to be short and easy for the individual to respond to. Statements and questions which are included in the questionnaire are designed for purposes of brevity, pertinence to the objectives of the study, and are limited to the scope of the research.

Validity

In order to determine if the data gathered by this study and the concept of the study itself conform to actual fact, a test of validity was conducted. Validity is the ability of a process or concept to correctly measure or "get at" the problem.

Helmstadter (1970) defines three methods for testing validity: content validation procedures, empirical validation procedures, and construct validation procedures. The content validation procedure involves logically analyzing the process and situation involved and stating whether or not the measurement "appears" to accomplish its purpose. Empirical validity involves proving the validity of a test by

analyzing only the relationship between the test behavior and the criterion behavior or by comparing test results with another performance test or another group in a similar situation. Construct validity involves proving the existence of a hypothetical construct or trait and showing how subjects with these traits would react in certain situations.

This study will be validated through the processes of content and empirical validation. Helmstadter (1970) mentions several different types of content validation of which face validation and logical or sampling validation will be used in this paper.

Face validation involves a simple subjective evaluation of the items in the test in order to ascertain whether or not they adequately fulfill the goals of the study. After the study and questionnaire were designed, they were reviewed by all members of the committee; and pertinent comments were incorporated in the design in order to face validate it.

The areas of behavior to be measured by the test in question are the individual's attitude toward law enforcement as it is applied in state parks and campgrounds, the individual's knowledge of park and campground rules, and whether the individual being sampled is inclined toward modern camping techniques or leans toward older, more conservative ways. The final section consists of demographic information which will allow specific comparisons with scores on other sections in order to enable scores to be grouped according to specified types.

In order to measure attitudes toward law enforcement, 20 questions were asked. Six of these questions refer to law enforcement or rules in general, while the other 14 measure attitude toward specific laws or

rules. These questions are randomly positively or negatively worded. With this large a selection of questions and a five item Likert scale to respond to, it is felt that the area is sufficiently well covered to differentiate between those who have generally positive or generally negative attitudes toward law enforcement as it is conducted on State parks and campgrounds.

The section on rules knowledge consists of 10 specific rules which were randomly positively or negatively worded. Ten items are considered sufficient to keep the section reasonably short while containing enough items to differentiate between those who have a reasonable knowledge of the rules and those who do not.

The portion of the questionnaire covering the individual's perception of the camper's role contains 11 items which are designed to determine what requirements the respondent feels that a good camper should meet. Again, a Likert scale is used in order to establish a value which represents the individual's perception of what should be required of the camper in today's campgrounds. It is felt that these questions adequately represent the respondent's perception of the camper role.

To empirically validate the results of the study, the data obtained through the questionnaire is compared with information gathered by Clark, Hendee and Campbell (1971a) in a study conducted in 1968 and 1969 in order to ascertain if the data gathered in the research for this thesis conforms to actual fact as measured in the earlier study.

The Clark, Hendee and Campbell study was carried out in various Washington State Campgrounds to gather information on campers' views, managers' views and managers' perceptions of campers' views on selected aspects of values, behavior and enforcement viewpoints as they are

practiced in campgrounds. The questions were given to the subjects in questionnaire form. Responses were made through checking one of three choices ranging from a negative choice to a choice of "somewhat" and on to positive. The fact that the choice of responses were more limited in the older study, that there was no neutral response choice, and that the Washington research is five or six years older may have an effect on how closely the two studies correlate.

The Washington State study found that 5 percent of the campers polled felt that additional rules and regulations would "not at all" detract from their camping experience; 26 percent were of the opinion that they could detract "somewhat" from their experience, while 21 percent felt that more rules would detract "a great deal" from their camping experience.

In the study presently under consideration, 62 percent of those responding to the statement, "public parks and campgrounds have too many restrictive rules and regulations" indicated that they disagreed with the statement, 15 percent strongly disagreed, 11 percent marked "unknown," 11 percent agreed, and 1.4 percent strongly agreed. The results show a relatively strong correlation between the two study items when allowance is made for the difference in response choices and the different geographical and time areas.

The Clark, Hendee and Campbell study also found that 79 percent of those polled believed that stricter enforcement of the rules would not detract from their camping experience, 13 percent felt it would have somewhat, and 8 percent were of the opinion that it would interfere a great deal. The present study statement that rangers could better utilize their time in other ways than enforcing rules and regulations found that

55 percent of campers polled disagreed with it, 17 percent strongly disagreed, 19 percent indicated "unknown," 6 percent agreed, and 12 percent strongly agreed. Again, a fairly strong correlation between the two studies can be noted.

In the Clark, Hendee and Campbell research, 4 percent of those contacted found no objection to campers bringing city conveniences to campgrounds, 21 percent stated that it could detract somewhat from their experience, and 37 percent felt that it would detract a great deal. The present study found that 42 percent of the respondents disagreed and 4 percent strongly disagreed with the statement that the good camper should use few modern conveniences; 20 percent were undecided, 28 percent agreed, and 6 percent strongly agreed. Here, as before, the results are fairly close.

In another section of the Washington study, it was found that 70 percent of campers were of the opinion that theft is "not now a problem." This does not entirely correspond with the results of the present study which indicated that 37 percent agreed and 3 percent strongly agreed with the statement, "Public parks and campgrounds are generally crime free as far as theft and violent acts are concerned." In the remaining response categories, 32 percent indicated unknown, 32 percent disagreed, and 6 percent strongly disagreed. The groups who found crime a problem are approximately the same in both studies, while those who marked the "unknown" response in the present study were almost one-third of the sample. Apparently, either a large number who would otherwise have found parks and campgrounds to be crime free took advantage of the neutral choice or in the years which passed between the two studies people became more aware of the fact that law enforcement problems are

mounting in recreation areas. In any case, the differences between the two items are not great and can very possibly be explained through differences inherent in the studies.

The similarities in the research results between the two studies along with the analysis of content validity establish the validity of the data gathered in the research for this thesis. From this point on, it will be assumed that the data is sound and that the study objectives and hypotheses may be tested through it.

Reliability

In order to further establish the amount of confidence which could be placed in the data gathered by the questionnaire, a reliability test was run. Reliability of the data was verified statistically by obtaining a Pearson Product-Moment Correlation Coefficient for each question in the law enforcement attitude, camper role attitude, and rules knowledge portions of the data. The coefficient was obtained by utilizing the program provided in the Statistical Package for the Social Sciences (SPSS), Nie Bent, and Hull in the form in which it was adapted to the Burroughs System (1970).

The coefficients obtained from the correlations were utilized to obtain a reliability factor by applying the Spearman-Brown Formula (Nunnally, 1967, p. 6-27).

$$r_{kk} = \frac{K\bar{r}_{ij}}{1 + (K-1)\bar{r}_{ij}}$$

" r_{kk} " is the square of the correlation of scores on a collection of items with true scores; "r" is the correlation coefficient; "K" is the number of items, and " \bar{r}_{ij} " is the average inter-item correlation. This formula was utilized in the law enforcement attitude and the camper role attitude sections to establish an overall reliability coefficient.

In order to establish a reliability factor for the rules knowledge section, the correlation coefficients were placed in the "Kuder Richardson Formula 20" (Nunnally, 1967, p. 6-27):

$$r_{kk} = \frac{K}{K-1} \left(1 - \frac{pq}{\sigma_y^2} \right)$$

"r" is the correlation coefficient; "K" is the number of items; "P" represents the "yes" answers; "q" the no answers, and " σ_y^2 " is the variance of the total test score.

In the law enforcement attitude section, an overall reliability coefficient of .68 was obtained. By eliminating variables 6, 7, 14, 16 and 17 (See Appendix A for an explanation of the variables), reliability was raised to .73. Variables 6, 7, 14, 16 and 17 were inter-item corollary scores which were low enough to significantly affect the overall reliability of the section. This same method of elimination is used in establishing the reliability of the rules knowledge section.

Neulinger (1974, p. 110) explains that research work involving personality variables usually results in low correlations. Correlations of .30 or higher are rare. In the statistical section of this paper, correlations range between .20 and somewhat above .30. Neulinger states that the reasons for this are because of the complexities of multivariate research and because many researchers fail to include environmental con-

texts into their predictive equations--a task which is often complex and difficult to accomplish, and the methods which are available are controversial. The study at hand relates to individual attitudes and perceptions and naturally deals to an extent with personality variables. Helmstadter (1970, p. 85) took the reliability scores of a number of well-known studies and placed them in a chart which showed the low, median and high reliability reported. Out of 18 attitude tests, high was .98, median was .79, and low reliability was .47. This places the reliability scores for this study around the median range of these established scores. Thus the reliability is not extremely high, but it is reliable enough that reasonable predictions and conclusions can be drawn from it.

The reliability factor obtained for the camper role perceptions section was also .73. This score was calculated without eliminating variables from the original coefficient.

Overall reliability in the rules knowledge section was .49. By eliminating variables 39, 40 and 45, the reliability score was raised to .80.

In any further calculations of the sample data, variables 6, 7, 14, 16, 17, 39, 40 and 45, which were eliminated in determining the reliability of the sample data, will not be utilized.

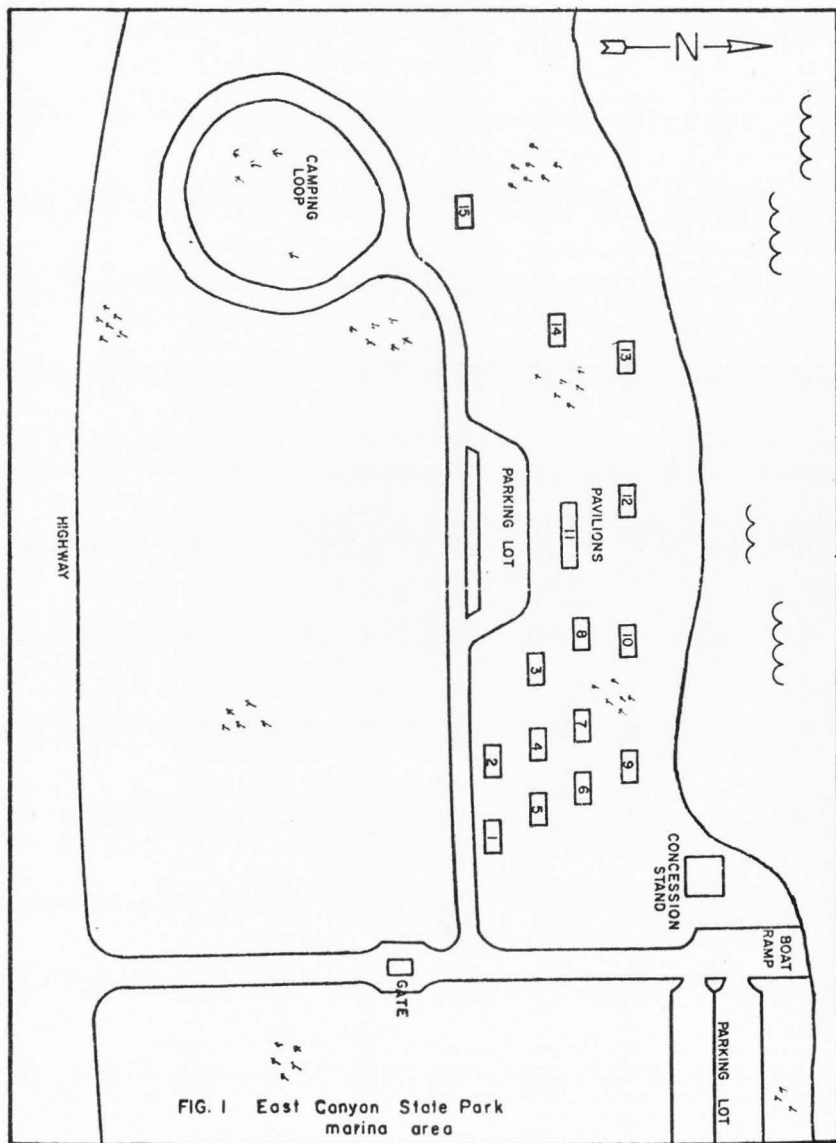
Descriptions of the Study Area

The area in which sampling for the study was conducted was the marina section of East Canyon State Recreation Area. The recreation area is situated on a reservoir near a high mountain pass on State Highways 65 and 66 approximately 40 miles southeast of Ogden City and 40 miles

northeast of Salt Lake City. Both cities are metropolitan areas which contribute large numbers of visitors to East Canyon on holidays and weekends. The site is also located on the original immigration trail of the pioneers who settled the region and which was later used by the Pony Express. Because of the nearness of the trail, the reservoir is often used as an overnight or daytime rest stop for tourists who are fishing, camping, picnicking and group parties.

The marina area is located on the northeast shoreline of the reservoir and was divided into three distinct sections (See Figure 1). The first section is the large paved parking lot on the shoreline adjacent to the boat launching ramp and the concession stand. This area is used for parking vehicles, boat trailers and campers. Overnight parking is allowed on this lot. The second section is the pavilion site for picnicking, with the paved parking lot to the east of it. The site contains 15 pavilions. Each pavilion has a wooden roof and cement floor, and all of the structures contain two large picnic tables, except for number 11 which has eight large picnic tables and a buffet table and number 15 which contains five large picnic tables. The pavilions are open to picnicking at any time and the two large ones can be reserved for group picnicking. Tent camping is allowed in this area, as is overnight parking of campers in the parking lot.

The third section is the camping loop. The loop consists of 20 pulloffs, each of which can accommodate a varying number of vehicles--some only one and some up to three. Most pulloffs have a picnic table, a steel barbequer, and/or a conduit lined fire pit. Overnight camping in the loop is allowed for both tents and vehicles. Most of the pulloffs could handle several vehicles at one time.



Drinking water is provided in several places in all three areas. Restrooms are the open holding tank type; one is located near the concession stand and one near the parking lot in the pavilion section. There are no trees and little shrubbery throughout the area, but a brittle wheatgrass does grow and is watered and kept cut.

Due to the liberal camping policy, there is a tremendous capacity for overnight camping. Because of the large capacity, vacillation in the number of campers is large. On holidays and weekends which occur in the middle of the season, there are extremely large numbers of campers packed into the marina area, while on some weekdays early and late in the season, there are almost none. The large variation in numbers has a definite effect on the number of questionnaires which could be handed out at different times.

An admission fee is charged all vehicles entering the marina area. One dollar is charged for day use and two dollars for overnight (this included day use). Walk-ins are charged fifty cents.

Sampling Design

A sampling technique was developed which would allow the questionnaire to be administered over the entire marina area as evenly as possible. Sampling was conducted over a seven-week period, from the 25th of July, 1974 to the 12th of September, 1974. In this manner the study was begun just after the peak visitation had started and continued until visitation had begun to fall off.

The questionnaire was passed out on Mondays, Thursdays, Saturdays and Sundays. Two weekdays and two weekend days were included in the

sample by using this pattern. Each questionnaire was marked with the day and the date on which it was filled out.

As can be noted in Figure 2, each of the three marina sections previously described has been marked with an odd and even numbered end. On alternating days, opposite ends of each section were used in passing out the questionnaires. For example, on Monday the even numbered sides of the sections were worked and on Thursday the odd numbered sides. The same pattern was followed on weekends to insure that approximately the same areas were worked to allow for comparison of weekend and week-day results.

When the individual administering the questionnaire approached a section, the instrument was handed out to the first people encountered. No more than two questionnaires were given to each group or family. Five questionnaires were handed out in each area on each sample day; although on some days this did not prove possible due to the fact that there were not enough people in the area. The individuals approached were informed that this was a graduate study being conducted under the auspices of Utah State University and Utah State Parks and Recreation.

After the form was given to an individual, it was left with him until the others in the area were handed out; then the administrator returned and picked them up in the same order in which they were given out. In this way the respondents were free to reply without outside influence. But any questions they had would be answered, if possible, by the administrator when he returned, and few if any of the forms would be lost.

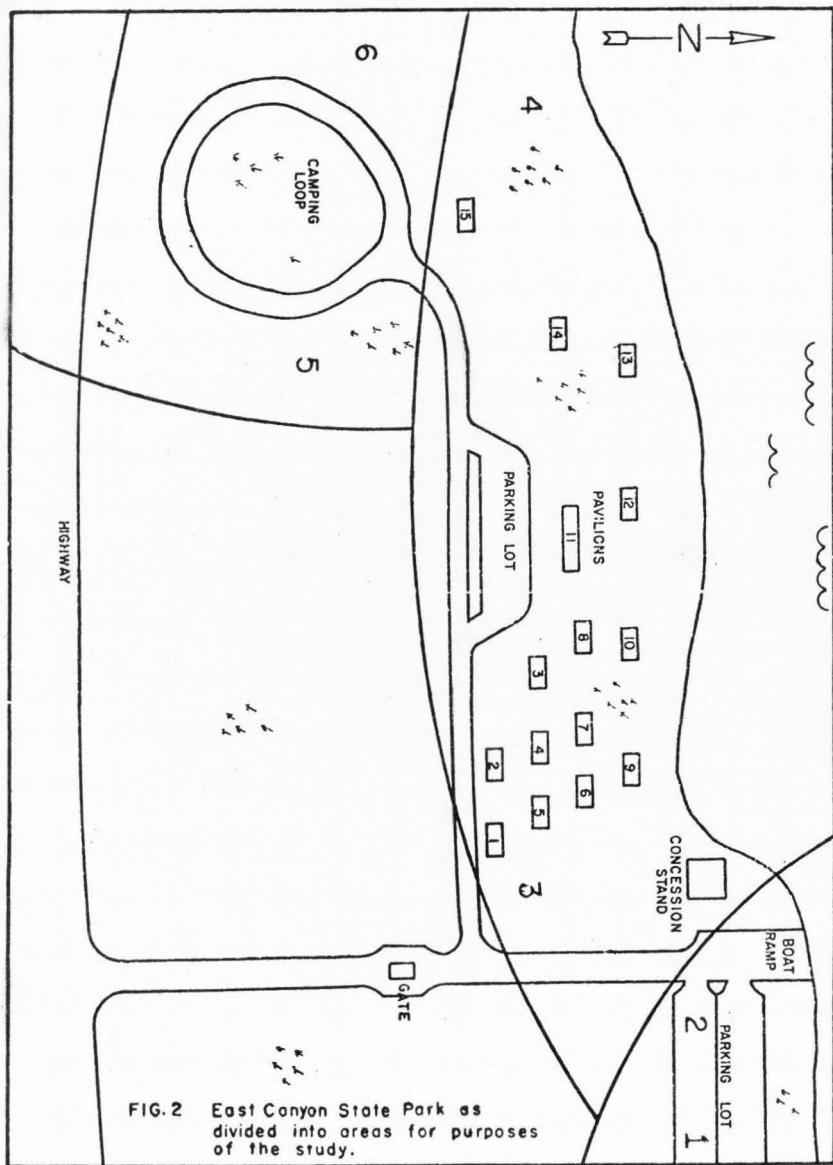


FIG. 2 East Canyon State Park as divided into areas for purposes of the study.

Since the author of this study was employed at East Canyon during the time the study was conducted, it was determined that the questionnaires would be marked in order to differentiate whether they were given out while in uniform or while in civilian clothes. However, it was found that literally all the subjects either assumed that the person administering the questionnaire was a ranger, knew that he was (many are repeat visitors), or asked if he were. Due to this fact, the attempt to keep a record for purposes of comparison was abandoned.

CHAPTER IV
ANALYSIS OF DATA

Introduction

During the study period at East Canyon Recreation Area, 215 questionnaires were given to individuals who agreed to fill them out (two individuals refused). Two questionnaires were returned in an unusable condition, and in five cases the questionnaire was apparently carried out of the park without being returned. The information cited below is a general description of the data obtained from the 208 questionnaires which were utilized in testing the hypotheses.

Social-Demographic Scale

Eighty-eight percent of the respondents indicated that they were residents of the State of Utah, while 11 percent claimed residence in a state other than Utah or a foreign country. Approximately 1 percent failed to respond to the question. Of those returning the questionnaire, 30 percent were from rural areas (counties with populations of 50,000 or less) and 67 percent indicated that they lived in counties with urban populations (over 50,000). In addition, 3 percent failed to respond to the question or wrote U.S.A. where the county was called for.

A breakdown of the ratio of urban and rural visitors on weekends and weekdays showed that on weekdays 76 percent of the respondents were urban residents and 24 percent were rural residents. On weekends 64 percent were urban dwellers and 36 percent came from rural areas.

In responding to the question of what size community they were raised in, the majority of the individuals appeared to have spent most of their youth in large urban areas. As Table 1 indicates, however, rural areas and towns were well represented:

Table 1. The size of community in which the major portion of the respondents' youth was spent, East Canyon Law Enforcement Study, 1974

Area Size	Percentage of Respondents
City of over 50,000	24
City of 11,000 to 50,000	18
City of 5,000 to 10,000	13
Town of under 5,000	16
Rural community	13
Rural farm	15

Occupations given in the sample were classified according to the categories used by the U.S. Bureau of the Census, with categories 13 and 14 added for those who responded as full-time students or as being over 62 and retired.

The occupations most often written in were professional and technical or business administration in nature, although a large number of craftsmen were also found to be included. Private household workers were also found to be included. Private household workers were also highly represented, but the greater portion of their number were housewives. The large percentage of students sampled in the study was probably due

to the fact that the University of Utah in Salt Lake City and Weber State College in Ogden, Utah are in relatively close proximity to the recreation area and also to the number of high school age gatherings which are held at the park. Although the park is located in a rural county which has a large amount of farm land, no farm occupations were represented in the sample

Table 2. Occupations given by the respondents, East Canyon Law Enforcement Study, 1974

Occupations	Percentage of Respondents
1. Professional, Technical and Kindred	16
2. Managers and Administrators (except farm)	10
3. Sales Workers	4
4. Clerical and Kindred Workers	5
5. Craftsmen and Kindred Workers	12
6. Operatives Except Transport	3
7. Transport Equipment Operatives	4
8. Laborers Except Farm	1
9. Farmers and Farm Managers	0
10. Farm Laborers & Farm Foremen	0
11. Service Workers Except Private Household	6
12. Private Household Workers	15
13. Over 62 Years of Age	6
14. Students	14
No Response	3

It is possible that some of the "no response" individuals may have failed to answer the question due to a social stigma being attached to their profession. Others may have upgraded their occupations for purposes of social satisfaction. In the case of farmers, many may work other jobs as well as farming and possibly responded with those occupations. The period during which the data was gathered is also the busy season for farm workers and may account for most of the failure to respond.

The percentage of males and females completing the questionnaire was 58 percent male and 42 percent female. When a group was approached with the questionnaire, the men usually stepped forward first to meet the individual administering it. Also, when the entire group was in camp, the men normally appeared least busy with cleaning or cooking.

The most highly represented age groups in the sample were those between 20 and 40. Those in the age group of over 62 were least well represented.

Table 3. Age class of respondents, East Canyon Law Enforcement Study, 1974

Age	Percent in Age Group
15 - 19	16
20 - 30	24
31 - 40	25
41 - 50	13
51 - 62	16
Over 62	6

The greatest number of respondents to the question of the amount of education completed indicated 12 years. The next highest level marked was "attended college." The large number in the "9 - 11" years category would indicate that a number were still attending high school or had never completed their secondary education.

Table 4. Level of education reported by respondents, East Canyon Law Enforcement Study, 1974

Years Education	Percentage Reported
8 years or less	2
9 - 11 years	20
12 years	37
Attended college	23
College graduate	13
Post graduate	5

Camping Patterns and Preferences

Family units visiting the park reflected the highest percentage of groups polled, with groups of friends showing up as second largest. Only one respondent mentioned belonging to a conservation organization. The answers to the question concerning the type of group preferred when visiting a state park or campground appeared to show that the family was the type of companionship most preferred, with friends being the next most highly preferred type of company. A "no preference" answer had to be added due to the number of written in responses indicating no preference.

Table 5. Type of group which respondent visiting the park reported he was with, East Canyon Law Enforcement Study, 1974

Type Group	Percentage Reporting
Family	69
Church	4
Friends	20
Office or Work Party	1
Conservation or Nature Organization	5
Other	4

Table 6. Type of company respondents preferred when visiting parks or campgrounds, East Canyon Law Enforcement Study, 1974

Type Company	Percentage Preferred
Family	40
Friends	25
Alone	4
No Preference	30

Most respondents preferred visiting parks and campgrounds in groups of six or less people. Here again a "no preference" answer had to be added to the possible responses to the question because of written in answers.

Table 7. Size of group preferred by respondents when visiting parks and campgrounds, East Canyon Law Enforcement Study, 1974

Size Group	Percentage Preferred
More than six	28
Six or less	70
No preference	1

Of the respondents, 37 percent indicated that they had visited state and federal parks from one to five times the previous year. A relatively large 12 percent answered that they had visited parks 21 times or more during the year.

Table 8. Number of visits respondents reported making during the past year to state and federal parks and campgrounds, East Canyon Law Enforcement Study, 1974

Visits	Percentage Reported
1 - 5 times	37
6 - 10 times	31
11 - 20 times	20
21 times or more	12

Attitudes, Knowledge and Perceptions

Responses to the law enforcement attitude, camper role attitude and rules knowledge section were complete; all questions were answered by those returning the questionnaire. Each section was scored separately

and the total score summed numerically. Scores for each question in the law enforcement attitude and camper role attitude portions were given values from one to five. An individual who responded with a highly pro-law enforcement attitude on a given statement received a score of five for that response. An undecided answer was scored three, and so forth. In this manner a high score was pro-law enforcement and a low score for the section was negatively inclined toward presently existing law enforcement practices. The total possible score in the enforcement section was 75 (Five questions were eliminated by the reliability test). The range of total responses is given below. One individual scored 75, and 95 percent of the respondents scored in the upper half of the possible range of scores.

Table 9. Law enforcement attitude scores totaled from the law enforcement section of the questionnaire, East Canyon Law Enforcement Study, 1974

Scores	Percentage of Respondents
71 - 75	2
66 - 70	10
61 - 65	21
56 - 60	25
51 - 55	21
46 - 50	16
40 - 45	5

The camper role attitude section was scored with a five, indicating strong agreement with the statement made on the questionnaire. A score of one was given when the respondent strongly disagreed. The total possible score was 55. An individual with a high score would theoretically identify with a relatively conservative or traditional camper role. Scores on this section ranged from 54 to 27. The distribution is given in Table 10.

Table 10. Perception of camper role scores totaled from the camper role section of the questionnaire, East Canyon Law Enforcement Study, 1974

Scores	Percentage of Respondents
50 - 55	4
40 - 49	51
30 - 39	42
20 - 29	3

Scoring on the rules knowledge portion was accomplished by giving one point for each correct answer and no points for an incorrect answer. The total possible score for the section was seven points (three questions were eliminated by the reliability test). The responses ranged from two correct to all seven correct. The number responding correctly on any one given question was in all but one case greater than the number responding incorrectly on the same question; however, the number of incorrect responses was large in some cases. The question on whether or not dead wood cutting was allowed had 58.7 percent incorrect responses. The answers as to horses being permitted off roads or designated trails

had 44.2 percent incorrect responses. These two questions were eliminated by the reliability test. In contrast, the questions concerning posted speed limits and pets on leashes received 90 percent or better correct responses. Table 11 shows the percentage of overall correct responses for the section. More detailed information on responses to individual attitude, knowledge, and role items is depicted in Appendix B.

Table 11. The total number of correct responses made by individuals on the rules knowledge section of the questionnaire, East Canyon Law Enforcement Study, 1974

Number of Correct Responses	Percentage of Respondents
0	.5
1	.5
2	1.0
3	4.0
4	7.0
5	15.0
6	30.0
7	41.0

Summary

Many responses, such as age, education, attitude toward law enforcement, and camper role skills tend toward a normal distribution. These are responses which reflect a relatively normal distribution within the general population. The fact that they show a normal curve is a reflection of the validity of the test. Other items such as age would not be expected to show a normal curve in this situation.

Generally the responses indicate that the majority of the people have a good knowledge of rules although not a perfect knowledge. Not all the questions asked were simple, but the fact that a number were missed indicates that a public education program is needed and that very probably some individuals responded in a manner which reflected the way they think the rules should be.

The perception of camper role scores reflects a moderate score range; few people scored high and few low. This coupled with a moderately high score on the law enforcement attitude scale indicates that the majority of individuals take a middle-of-the-road attitude to present enforcement and camping standards. Few individuals agree or disagree strongly with present laws and enforcement practices, although the trend is toward support of laws and enforcement. The same approach is taken with individuals in regard to their perception of the camper's role. He does not feel that he has to be a strong backwoodsman type or that he has to be ultra-modern and live in his self contained camper. In this section the respondent may not want to commit himself too strongly in either direction. But the purpose was to find the individual's perception of the camper role, and this proves to be a middle-of-the-road approach.

The reader must keep in mind that the average respondent is from an urban area, has a white collar job, is 20 to 40 years old, and has a high school diploma and possibly at least some college. He is visiting the area with family or friends, prefers a small group, and last year visited similar type areas from one to 10 times.

CHAPTER V
STATISTICAL TESTS AND COMPARISONS
OF THE SAMPLE DATA

The purpose of this chapter is to statistically test the four hypotheses developed in Chapter One. In review, the hypotheses are:

1. Respondents with pro-law enforcement attitudes will exhibit traditional (conservative) camper role skill perceptions.
2. Respondents with pro-law enforcement attitudes will tend to have a high knowledge of park and campground rules.
3. Respondents with conservative camper role skill perceptions will tend to have a high knowledge of park and campground rules.
4. The intervening variables measured in the demographic section of the questionnaire may have a significant effect on the individual's attitude toward law enforcement.

The hypotheses were tested by utilizing Pearson Product-Moment Correlations and Partial Correlations to control for the probable influence of spurious factors. The statistical programs which were used were taken from The Statistical Package for the Social Sciences (SPSS) by Nie, Bent and Hull (1970) as adapted to the Burroughs Computer System.

Statistical correlation allows the investigator to determine the results from two or more sets of data to compare how close they come to being identical. If the results are identical then they are perfectly correlated, and the correlation coefficient will be 1.00. The coefficient can take any value between 1.00 and -1.00 which denotes perfect negative correlation.

Partial correlation was utilized in this study because it allows the user to find the correlation coefficient between two variables and it also permits the user to compute the coefficient while controlling for one or more intervening variables; that is, an adjustment is made mathematically to exclude the effects which one or more specified variables would have while computing correlations, variables such as the day of the week, age or sex, which could affect the individual's attitudes or perceptions. This allows one to make such calculations as finding the correlation between law enforcement attitude and rules knowledge while controlling for or excluding the effects which the day of the week on which the questionnaire was passed out would have on the correlation.

Hypothesis One: Hypothesis one states that respondents with pro-law enforcement attitudes will exhibit traditional camper role skill perceptions. This was tested by using the law enforcement attitude score and correlating it with the perception of camper role score through a partial correlation program. The result was a correlation coefficient of .26 with a significance of .001. The significance or probability level is the power of the test or the degree to which we may depend on it. The lower the significance value, the more dependable the test. A coefficient of $r = .26$ ($p < .001$) is sufficient to imply a positive relationship between the two variables.

A further partial correlation test was run between the variables "law enforcement attitude" and "attitude toward role skills" while controlling for the intervening variables: day of the week on which the questionnaire was distributed, the area in which it was distributed, the type group which the person was with, the individual's age, his sex, the highest education obtained, the number of visits to state and federal

parks during the previous year, the type group he prefers, the type area he was raised in, his occupation, and his state of residence (Utah or out of state).

Table 12 shows the correlations when each of these variables is controlled for.

Table 12. Correlation coefficients resulting when law enforcement attitude and camper role skills perception scores are controlled for, East Canyon Law Enforcement Study, 1974

Variable Controlled For	Coefficients
1. Day of the Week	.2690
2. Area of Park	.2590
47. Type Group Visiting With	.2550
48. Age	.2256
49. Sex	.2542
50. Education	.2773
51. No. Visits in Previous Year	.2550
52. Type Group Preferred	.2515
54. Type Area in Which Raised	.2565
57. Occupation	.2557
58. Residency	*.2600

*The probability of all coefficients was $< .001$.

The results show that there is no significant change in the correlation between law enforcement and role skills when the effects of the intervening variables are controlled for. The largest changes were noted when "age" was controlled for with a reduction in the coefficient of

.03 and "education," where an increase of .02 occurred. Neither of these differences appear to be greatly significant, although further investigation may prove that what differences do show in the data occur in such areas as very young or very old age groups, which comprise only 22 percent of the study population, or other variables which could greatly affect the outcomes of the data. Other studies conducted in this area may do well to pay specific attention to the variables of "age" and "education," as they continue to show a noticeable variance from the other data throughout the study.

Hypothesis Two: The second hypothesis to be tested states that respondents with pro-law enforcement attitudes will tend to have a high knowledge of park and campground rules. This hypothesis suggests that the individual who is aware of the rules will have a positive attitude toward law enforcement.

In this case the partial correlation coefficient was $r = .32$ ($p < .001$). This correlation coefficient is fairly significant and even higher than the association between law enforcement and attitude toward camper role skills.

The partial correlation run, controlling for the intervening variables, produced the following results.

Table 13. Correlation coefficients resulting when law enforcement attitude and knowledge of park and campground rules scores are compared with intervening variables controlled for, East Canyon Law Enforcement Study, 1974

Variable Controlled For	Coefficients
1. Day of the Week	.3125
2. Area of Park	.3236
47. Type Group Visiting With	.3221
48. Age	.2940
49. Sex	.3213
50. Education	.2970
51. No. Visits in Previous Year	.3225
52. Type Group Preferred	.3115
54. Type Area in Which Raised	.3249
57. Occupation	.3245
58. Residency	*.3272

*The probability of all coefficients was $<.001$.

As in the previous case, the controlled variables account for only a small variation in the correlation. However, as before, the greatest variation occurs when controlling for "age" and "education," which produce differences from the original coefficient of .0299 and .0269 respectively. The differences are not great, but they do tend to reinforce the fact that age and education are producing the largest differences from the original correlation. The correlation coefficients produced from testing this hypothesis are somewhat larger throughout than those found with the tests of the first hypothesis. However, this

could be due to differences inherent in the questionnaire or in the procedure.

The significant correlation suggests a slight relationship between the variables. This hypothesis suggests that individuals who know the rules will have a positive attitude toward law enforcement, although this does not imply that a person who knows the rules will not violate them. It merely means that he is less likely to break them.

Hypothesis Three: The third hypothesis states that respondents with conservative camper role skill perceptions will tend to have a high knowledge of park and campground rules. That is, the individual who has a conservative attitude toward camper role skills (as defined in Chapter Three) will be likely to have a good knowledge of park and campground rules and vice-versa.

A partial correlation coefficient was computed. The partial correlation coefficient obtained was: $r = .06$, $s = .211$. Due to the low correlation coefficient and the poor significance of the test, the hypothesis was rejected.

A partial correlation test controlling for intervening variables produced the following results:

Table 14. Correlation coefficients resulting when camper role skill perceptions and knowledge of park and campground rules scores are compared with intervening variables controlled for, East Canyon Law Enforcement Study, 1974

Variable Controlled For	Coefficients
1. Day of the Week	.0657
2. Area of Park	.0612
47. Type Group Visiting With	.0544
48. Age	.0327
49. Sex	.0532
50. Education	.0644
51. No. Visits in Previous Year	.0553
52. Type Group Preferred	.0467
54. Type Area in Which Raised	.0605
57. Occupation	.0567
58. Residency	*.0561

*The probability of all coefficients was $>.05$.

It can be readily noted that the coefficients and significance are almost uniformly low. This may be due to faulty methods, but most likely stems from the fact that the two variables do not correlate.

As in the previous hypothesis testing sections, the "age" and "education" variables show the greatest variance from the original coefficient. The variable "day of the week" also produced a variance which may reflect some significance; but since the difference caused by the "day of the week" is small and occurs noticeably only in this section, no further tests will be made with it.

Hypothesis Four: This hypothesis explores the possibility that the intervening variables (day of the week, area, group type, etc.) may have a significant effect on the law enforcement attitude score. The process used to test the hypothesis has been shown in the previous hypothesis testing sections where the correlation coefficients between two variables have been controlled for in the case of each intervening variable (See Tables 12 and 14).

In most cases the intervening variables appear to have little effect on the original coefficients; however, the variables "age" and "education" have an effect in all three comparisons. Effects of the variables apparently are not great, but they do create a noticeable difference in the coefficients. It is possible that these areas merit further investigation. "Age" and "education" yielded a much higher correlation difference in the original partial correlation with law enforcement (See Table 12) than with the other hypothesis testing correlations.

A more detailed discussion of the outcome of these tests and their implications is contained in the following chapter.

CHAPTER VI
A DISCUSSION OF THE HYPOTHESIS TESTING
RESULTS AND THEIR IMPLICATIONS

The following general conclusions can be drawn from the statistical tests of the findings:

1. The individual with a pro-law enforcement attitude will possibly exhibit traditional (conservative) camper role skill perceptions.
2. The individual with a pro-law enforcement attitude will probably have a high knowledge of park and campground rules.
3. The individual's perception of camper role skills is apparently not related to his knowledge of park and campground rules.

A fourth conclusion which can be made from the study is that possibly the age of the camper and the number of years of education which he has completed have a relationship with his attitude toward law enforcement.

A problem encountered during the study was that the strength of the relationships mentioned above was somewhat low. Theoretical significance was found, but substantial significance was negligible. The problem could lie in the sampling design or it could lie in the fact that personality variables are difficult to assess, as was pointed out in Chapter Three. The multiplicity of variables involved in the study could also have been a factor. In any study where personalities are involved, a tremendous number of variables enter into the situation and it is nearly impossible to control for all of them.

Conclusion and Implications

The statistical tests discussed in Chapter Five indicate a slight relationship between the variables in hypothesis one and hypothesis two, which dealt with attitudes toward law enforcement, with perceptions of camper role skills, and with knowledge of park and campground rules. And hypothesis three, suggesting a relationship between perception of camper role skills and knowledge of park and campground rules, rendered such a low correlation that it was rejected. Obviously all three are related; however, the statistical tests show that there is no direct relationship between the individual's perception of what camper role skills should be and his knowledge of park and campground rules. Apparently there is no need to know the park and campground rules in order to develop a perception of the camper's role.

Perceptions can be drawn from the sources listed in Chapter Two-- from social learning situations. The family, special interest organizations, peer groups, the mass media, and other sources, as well as actual experience in the subject, develop one's perception of it. Knowledge of rules and laws and even one's attitude toward law enforcement can be greatly influenced by the same factors.

The implications inherent in these findings are rather important to recreation agencies. The findings would argue that a large part of law enforcement action should lie in the area of behavior control or behavior modification. Since role behavior is in general formed through social and group action, then responsibility for development of proper and acceptable recreation area behavior should lie as much as possible with recreation organizations such as camping clubs, environmental and con-

ervation groups, youth organizations, etc. By outlining specific programs, even nonrecreation oriented groups such as the PTA, church organizations, business groups, and others could be utilized to assist in forming behavior patterns which are more compatible with acceptable outdoor recreation.

Considering the recent tremendous increases in the numbers of visitors to recreation areas and the subsequent increases in criminal and deviant behavior, Clark, Hendee and Campbell's recommendations calling for stricter enforcement of laws, better communications with the public, and educating the public as to the consequences of violations would assist greatly in lowering the crime rate. However, programs aimed at reducing the incidence of crime by ensuring behavior which is conducive to a good recreation experience for all involved may be of much greater value.

Such programs would entail developing:

1. Specific plans to form role behavior which is acceptable to recreational purposes in individuals such as youth who do not yet have a fully constructed recreation role.
2. Individuals who already possess a recreation role which is not acceptable to recreation purposes must be caused to construct a new role which is acceptable.

The goals stated above do not imply a general program of behavior control, but do recommend a program which utilizes social forces which are already present in society and which cause individuals to conform to social conventions, styles and leadership.

Success in a role behavior modification program would involve concentrated effort aimed at causing the public to accept a recreation behavior role in a manner similar to that in which they accept social styles and conventions. Acceptance and maintenance of appropriate behavior would occur through society's approval and disapproval as explained in Chapter Two, where Andrews and Karlins paraphrase Skinner.

The problem for recreation agencies is to initiate programs which would accomplish this. Such programs have to reach the public and must be accepted by them.

Recommendations for Creating Acceptable
Recreation Behavior

The following are recommended programs for creating acceptable recreation behavior in the general public:

1. Laws, rules and regulations must be made readily available to the public in language and formats which they can clearly and easily understand.

Common complaints made by the public are that laws and rules are often not readily available to them and that when they are they cannot understand them (Clark, Hendee and Campbell, 1971b). This occurs because laws are often written in rhetoric which is not intended to be understood by the layman. Special brochures and information sheets could be issued by agencies involved in the various recreation activities and approved by prosecuting attorneys who will have to deal with the offenders who will be using these brochures and bulletins. Specific reasons for the existence of these laws should also be given.

2. As recommended by Clark, Hendee and Campbell (1971b), laws, rules and regulations should in many cases be more strictly and uniformly enforced. Laws which are enforced haphazardly or when convenient tend to produce confusion and misunderstanding in the people who have to live and recreate with them. In many cases this has to do with the training of officials, with the attitude of the entire system, and with the manner in which officers use discretion in dealing with violators.

3. Educational contacts through lectures, publications and other public relations releases must be conducted on a large scale. Special projects entailing educational, cooperative and entertainment programs which are suitable for various types of groups ranging from boy scouts to chambers of commerce must be developed and utilized.

It is this close and cooperative contact with groups which will be the crucial step in developing appropriate role behavior. Not only should agencies give information to interested groups, but they should maintain close liaisons with them both at their home base of operations and while they are recreating on public lands. Special lectures, work projects and training programs could be developed and employed both on public reserves and at the group's meeting place. For organizations such as the boy scouts, environmentalists or outdoor enthusiasts, the projects should not be difficult to design. Other groups which are not nature or outdoor oriented may be more difficult to reach, especially in the younger age groups; but most people have an area of interest which can be appealed to in order to retain their attention.

The important aspect of the approach appears to be capturing and holding the interest of organizations and individuals so that a degree of control can be maintained. Probably the area of greatest difficulty is

that the programs must be extremely widespread in order to achieve the needed effect. Cooperative and overlapping projects between recreation agencies may be of help in overcoming the large work load which individual agencies would develop.

Up to this point the discussion has concerned itself with the advantages which knowledge of role behavior could have for entire organizations. There could also be benefits for individual managers and rangers. Knowing how groups work, how social functioning produces and changes behavior, and what the goals and functional purposes of various organizations which may visit his area are, may be of a great deal of help. The manager would have a more clear idea of how to work with groups and individuals who visit his area, how to recognize their interests and deal with them, as well as how to spot potential trouble and how to deal with it before it begins.

Programs for the development of more appropriate role behavior may also be utilized to create a more favorable image of the ranger or recreation area manager.

Present attitudes toward law enforcement on recreation reserves include even a controversy over the ranger's role. As Essex (1971) stated, "The traditional ranger in many areas today is primarily a lawman. . . ." Apparently, many individuals have difficulty in adjusting to this new aspect of the ranger's duties. A casual statement made by one visitor to East Canyon State Recreation Area sums up the opinion of much of the public: "I thought the ranger was there to pick up trash and ask people not to do what they are doing." Attitudes such as this directed toward the ranger who must enforce the laws only serve to hinder him in carrying out his duty.

The difficulty at this point is in acquiring the training for individual rangers. Training involves expense and cost, and the value of the program must outweigh its costs.

Outdoor recreation involves contacts between individuals and social groups and between people and nature. This very aspect of the program makes a knowledge of role behavior essential to the agencies responsible for recreation management in order to prevent social disturbances as well as damage to the environment by visitors. If this can be accomplished, then the value of the program will outweigh its costs.

BIBLIOGRAPHY

- Allport, Gordon W. 1967. Attitudes. In Martin Fishbein (Ed.). Readings in Attitude Theory and Measurement. John Wiley and Sons, Inc., New York.
- Biddle, Bruce J., and Edwin J. Thomas (Ed.). 1966. Role Theory: Concepts and Research. John Wiley and Sons, Inc., New York.
- Bijou, Sidney W., and Emilio Ribes-Inesta (Ed.). 1972. Behavior Modification. Academic Press, New York.
- Burch, William R., Jr., and W. D. Wenger, Jr. 1967. The Social Characteristics of Participants in Three Styles of Family Camping. U.S. Forest Service Research Paper. Pacific Northwest Forest and Range Experiment Station, Portland, Oregon. PNW-48.
- Bureau of Land Management. 1971. Appendix to Planning Guidelines for the California Desert Program.
- Clark, Roger N., Hendee, John C., and Frederick L. Campbell. 1968. Law and Order in Public Parks. Trends in Parks and Recreation. 3(12): 28-31, 51-55.
- Clark, Roger N., Hendee, John C., and Frederick L. Campbell. 1971. Depreciative Behavior in Forest Campgrounds: An Exploratory Study. USDA Forest Service Research Note. PNW-161 (B).
- Clark, Roger N., Hendee, John C., and Frederick L. Campbell. 1971. Values, Behavior and Conflict in Modern Camping Culture. Journal of Leisure Research. 3:143-159 (A).
- Clawson, Marion. 1974. How Much Leisure Now and In the Future. In David W. Fischer, John E. Lewis and George B. Priddle (Ed.). Land and Leisure. Maaroufa Press, New York.
- Cone, W. B. 1972. Law Enforcement in Parks and Recreation Areas: A "Goal Oriented" Approach. Rocky Mountain-High Plains Park and Recreation Journal. 9(1):81-85.
- Essex, D. J. 1971. Crisis Law Enforcement. Rocky Mountain-High Plains Parks and Recreation Journal. 3(1):38-43.
- Helmstadter, G. C. 1970. Research Concepts in Human Behavior. Appleton-Century-Crofts, New York.

- Karllins, Marvin, and Lewis M. Andrews (Ed.). 1972. Man Controlled. The Free Press, New York.
- Lindzey, Gardner, and Elliot Aronson (Ed.). 1968. Handbook of Social Psychology, 2 Vols. Reading, Massachusetts. Vol. 1: Role Theory, by Sarbin, Theodore R., and Vernon L. Allan.
- Middlebrook, Patricia Miles. 1974. Social Psychology and Modern Life. Alfred A. Knopf, New York.
- Neulinger, John. 1974. The Psychology of Leisure. Charles C. Thomas, Springfield.
- Nie, Norman, Bent, Dale H., and C. Hadlai Hull. 1970. Statistical Package for the Social Sciences (SPSS). McGraw Hill, New York.
- Phillips, Bernard S. 1967. Social Research: Strategy and Tactics. Macmillan Co., New York.
- Reynolds, Jesse A. 1967. Public Disregard, Vandalism, Littering, Increase Workload. Parks and Recreation. 2(10):39-40, 50.
- Turner, Ralph H. 1972. Deviance Avowal as Neutralization of Commitment. Social Problems. 19(3):308-231.

APPENDIX A

Attitudes and Knowledge Questionnaire

I.D. _____

Day Type _____

Activity _____

STATE PARK LAW ENFORCEMENT ATTITUDE SURVEY

The following are statements of opinion and you are asked to mark the extent to which you agree or disagree. Circle your choice of answers.

- | | strongly
agree | agree | unknown | disagree | strongly
disagree |
|---|-------------------|-------|---------|----------|----------------------|
| 1. Public parks and campgrounds have too many restrictive rules and regulations. | SA | A | U | D | SD |
| 2. It is necessary to have rules against cutting firewood in public parks and campgrounds. | SA | A | U | D | SD |
| 3. There is no need to restrict noise after 10 p.m. in a campground. | SA | A | U | D | SD |
| 4. Public parks and campgrounds are generally crime-free as far as theft and violent acts are concerned. | SA | A | U | D | SD |
| 5. Public parks and campgrounds are good places to have parties. | SA | A | U | D | SD |
| 6. Pets should be leashed at all times in parks and campgrounds. | SA | A | U | D | SD |
| 7. Campers should not be allowed to build fires wherever they want in parks and campgrounds. | SA | A | U | D | SD |
| 8. Motorbikes and small all-terrain vehicles should be allowed to operate off the roads in parks and campgrounds. | SA | A | U | D | SD |
| 9. Vehicles need not be required to have adequate mufflers while in state parks. | SA | A | U | D | SD |

	strongly agree	agree	unknown	disagree	strongly disagree
10. Laws governing moral behavior should not be enforced in parks and campgrounds.	SA	A	U	D	SD
11. Juveniles should be allowed to operate motorbikes in public parks and campgrounds.	SA	A	U	D	SD
12. Open fires should not be allowed in parks and campgrounds during the dry season.	SA	A	U	D	SD
13. Litter is overemphasized as a park and campground problem.	SA	A	U	D	SD
14. Unsupervised youth and youth groups cause greater amounts of disturbance, litter and destruction in parks and campgrounds than any other age group.	SA	A	U	D	SD
15. Entrance fees should not be charged at public parks and campgrounds.	SA	A	U	D	SD
16. Areas in parks and campgrounds should be closed to camping, picnicking and driving only if they are hazardous to life or health.	SA	A	U	D	SD
17. Firearms should be restricted from all public parks and campgrounds.	SA	A	U	D	SD
18. State vehicle registration laws should not be enforceable on parks and campgrounds.	SA	A	U	D	SD
19. State traffic laws should be enforced in public parks and campgrounds.	SA	A	U	D	SD
20. Public park and campground managers and rangers could better utilize their time in other ways than enforcing laws, regulations and rules.	SA	A	U	D	SD

strongly agree agree unknown disagree strongly disagree

In the following questions, answer to what extent you agree or disagree that a modern camper should act or behave. A good modern camper should:

21. be relatively quiet	SA	A	U	D	SD
22. respect others rights.	SA	A	U	D	SD
23. know how to build a campfire quickly.	SA	A	U	D	SD
24. have the ability to set up a tent quickly and easily.	SA	A	U	D	SD
25. be an expert in first aid.	SA	A	U	D	SD
26. learn the legal restrictions of the area he is in.	SA	A	U	D	SD
27. uses few modern conveniences.	SA	A	U	D	SD
28. take action against others who violate laws.	SA	A	U	D	SD
29. be a good hunter.	SA	A	U	D	SD
30. be able to read maps and compasses.	SA	A	U	D	SD
31. be a conservationist.	SA	A	U	D	SD

Which of the following are or are not park and campground rules?

	YES	NO
32. No loud noises after 10 p.m.	___	___
33. Pets must be leashed.	___	___
34. No relieving oneself except in toilet facilities.	___	___
35. Group assemblies are permitted without reservations.	___	___
36. Dead trees may be cut for firewood.	___	___
37. Motorbikes and trailbikes are not allowed off the roads.	___	___
38. Firearms, including b.b. guns, are not permitted on parks and campgrounds.	___	___
39. Speed limits are posted.	___	___

- | | YES | NO |
|--|-----|-----|
| 40. Fires are permitted outside grills and firepits. | ___ | ___ |
| 41. Horses are not permitted off roads or designated trails. | ___ | ___ |

Please check the appropriate answer to the following questions:

42. Type of group you are with (Check One):

<input type="checkbox"/> Family	<input type="checkbox"/> Office or work party	
<input type="checkbox"/> Church	<input type="checkbox"/> Conservation or nature organization	1 2 3
<input type="checkbox"/> Friends		4 5 6
<input type="checkbox"/> Other		

43. Age at last birthday:

<input type="checkbox"/> 15-19	<input type="checkbox"/> 20-30	<input type="checkbox"/> 31-40	1 2 3
<input type="checkbox"/> 41-50	<input type="checkbox"/> 51-62	<input type="checkbox"/> Over 62	4 5 6

44. Your sex: Male Female 1 2

45. Your education: 8 years or under 9-11 years 1 2 3
 12 years attended college 4 5 6
 college graduate post graduate

46. How often did you visit state and federal parks last year:

<input type="checkbox"/> 1-5 times	<input type="checkbox"/> 11-20 times	1 2
<input type="checkbox"/> 6-10 times	<input type="checkbox"/> 21 times or more	3 4

47. When camping in a state park, do you prefer to be with:

<input type="checkbox"/> Family	<input type="checkbox"/> Friends	<input type="checkbox"/> Alone	1 2 3
---------------------------------	----------------------------------	--------------------------------	-------

48. When camping in a state park, do you prefer to be with:

<input type="checkbox"/> A large group (more than six)	<input type="checkbox"/> A small group (less than six)	1 2
--	--	-----

49. As a youth did you spend most of your time:

<input type="checkbox"/> on a rural farm	<input type="checkbox"/> in a small city (5 to 10,000)	1 2 3
<input type="checkbox"/> in a rural community	<input type="checkbox"/> in a city (11 to 50,000)	4 5 6
<input type="checkbox"/> in a town-under 5,000	<input type="checkbox"/> in a large city (over 50,000)	

50. Do you belong to any conservation groups:

Yes No Name of organization _____ 1 2

(If yes, please answer the next two questions)

51. Do you attend meetings regularly:

Yes No 1 2

52. Do you hold any positions or offices in your group:

Yes No 1 2

53. Your occupation:

1 2 3
4 5 6
7 8

54. Please write the State and County in which you live:

APPENDIX B

Questionnaire Response Frequencies in Percentages

Table 15. State Park Law Enforcement Attitude Survey Frequency
Response table (in percentages)

	strongly agree	agree	unknown	disagree	strongly disagree
1. Public parks and campgrounds have too many restrictive rules and regulations.	1	11	11	62	15
2. It is necessary to have rules against cutting firewood in public parks and campgrounds.	34	59	1	5	5
3. There is no need to restrict noise after 10 p.m. in a campground.	6	13	3	40	38
4. Public parks and campgrounds are generally crime-free as far as theft and violent acts are concerned.	3	37	32	22	6
5. Public parks and campgrounds are good places to have parties.	12	61	4	21	3
6. Pets should be leashed at all times in parks and campgrounds.	32	47	3	14	4
7. Campers should not be allowed to build fires wherever they want in parks and campgrounds.	40	43	3	10	4
8. Motorbikes and small all-terrain vehicles should be allowed to operate off the roads in parks and campgrounds.	26	27	6	34	7
9. Vehicles need not be required to have adequate mufflers while in state parks.	6	6	3	46	39
10. Laws governing moral behavior should not be enforced in parks and campgrounds.	4	11	6	38	41
11. Juveniles should be allowed to operate motorbikes in public parks and campgrounds.	4	25	6	41	24

	Strongly agree	agree	unknown	disagree	strongly disagree
12. Open fires should not be allowed in parks and campgrounds during the dry season.	24	49	9	15	3
13. Litter is overemphasized as a park and campground problem.	2	8	4	43	42
14. Unsupervised youth and youth groups cause greater amounts of disturbance, litter and destruction in parks and campgrounds than any other age group.	15	31	32	18	4
15. Entrance fees should not be charged at public parks and campgrounds.	15	20	8	46	11
16. Areas in parks and campgrounds should be closed to camping, picnicking and driving only if they are hazardous to life or health.	16	58	8	15	3
17. Firearms should be restricted from all public parks and campgrounds.	44	38	4	10	3
18. State vehicle registration laws should not be enforceable on parks and campgrounds.	4	15	11	48	22
19. State traffic laws should be enforced in public parks and campgrounds.	29	57	5	7	1
20. Public park and campground managers and rangers could better utilize their time in other ways than enforcing laws, regulations and rules.	2	7	19	55	17

In the following questions, answer to what extent you agree or disagree that a modern camper should act or behave. A good modern camper should:

	strongly agree	agree	unknown	disagree	strongly disagree
21. be relatively quiet.	22	70	3	4	1
22. respect others rights.	49	51	0	0	0
23. know how to build a campfire quickly.	8	51	23	17	1
24. have the ability to set up a tent quickly and easily.	7	59	19	14	.5
25. be an expert in first aid.	14	50	15	21	0
26. learn the legal restrictions of the area he is in.	16	77	4	2	.5
27. uses few modern conveniences.	6	28	20	42	4
28. take action against others who violate laws.	10	49	20	19	2
29. be a good hunter.	10	25	26	37	3
30. be able to read maps and compasses.	14	62	12	12	1
31. be a conservationist.	20	53	14	12	1

Which of the following are or are not park and campground rules?

	CORRECT	INCORRECT
32. No loud noises after 10 p.m.	89	11
33. Pets must be leashed.	91	9
34. No relieving oneself except in toilet facilities.	83	17
35. Group assemblies are permitted without reservations.	68	32
36. Dead trees may be cut for firewood.	41	59
37. Motorbikes and trailbikes are not allowed off the roads.	75	26
38. Firearms, including b.b. guns, are not permitted on parks and campgrounds.	80	20
39. Speed limits are posted.	91	9

	CORRECT	INCORRECT
40. Fires are permitted outside grills and firepits.	81	19
41. Horses are not permitted off roads or designated trails.	56	44

VITA

Gerald R. Grove, Jr.

Candidate for the Degree of

Master of Science

Thesis: Role Theory Considered as an Influence on Criminal and Deviant Behavior in the Utah State Park System--A Manager Problem

Major Field: Outdoor Recreation

Biographical Information:

Personal Data: Born at Portsmouth, Virginia, April 23, 1945, son of Gerald R. and Beverly J. Grove.

Education: Attended elementary schools in Palm Beach, California; Tribune, Kansas; and Taylor, Utah. Junior High and High Schools were completed in Logan, Utah and Ogden, Utah respectively. Completed requirements for the Bachelor of Science in English Literature with a minor in German in June, 1971. Graduated from the Utah State Police Academy in November, 1972.

Professional Experience: Worked as a Police Officer in Ogden, Utah from October, 1971 to September, 1973; employed by Utah State Parks and Recreation at East Canyon State Recreation Area from May, 1974 to September, 1974 and from April, 1975 to September, 1975.