HUNTING POPULARITY: A CASE STUDY IN AN ORGANIZATIONAL SETTING^{1, 2}

by

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ABSTRACT

Only by isolating similarities and differences between those who strongly oppose or favor hunting can programs be developed to increase understanding about hunting as a wildlife management tool. The extremities of the continuum were studied because this is where a clearer understanding of demographic, adolescent experience, and attitudinal type variables can be obtained. It was found that sex. occupation, nature of the community during youth, occupation of father, and meaning of hunting lands were the important variables in determining differences. There was also a great degree of similarity between groups, that is, both groups tended to be residents; married; 36 years of age or older; have high cognitive, affective, and expectations scores toward public forested land and Game Lands 176; have positive meaning scores toward public forested land; have a self-actualization need for the land; select recreational alternatives on the basis on consequence; and their recreational behavior was between 0 to 25 percent learned. There were far more similarities than differences between these groups. The primary implication is that educational programs are needed to bond and overcome minor differences between these groups so a unified effort can be put forth by those individuals who are concerned about habitat and wildlife. Only through a concerted effort can their interest be adequately represented in the political arena.

INTRODUCTION

Hunting as a recreational activity has been, and is being, scrutinized. There are basic questions raised about the ethical nature of the sport, its usefulness as a wildlife management tool, etc. (Klein, 1973; Schole et al., 1973). Discussions and arguments about the benefit or baneful nature of hunting are usually clouded with emotional overtones. Empirical research is needed. Studies to date have been primarily of a descriptive nature. These studies sought to describe the status of the public's feelings with regard to this issue (Applegate, 1973; Groves et al., 1972; Wright and Lancaster, 1972; Minneapolis Tribune, 1970). Findings indicate there is a large percentage of the population that is undecided or opposed to sport hunting, depending upon the locality. These studies sought to isolate differences among these groups using primarily demographic characteristics, and have also emphasized the need for more empirical studies to deal with non-demographic aspects as another source of differences among groups (Applegate, 1973).

Although much useful information is obtained from the general population, a clearer understanding of those variables that are important in formation of attitudes toward hunting as a recreational activity may be obtained by studying the extremities of the continuum. Since most of those who hold the strongest opinions are leaders of the movement and are usually members of an organization (Hendee, 1971), the study was conducted in an organizational setting (Frodelius, 1973). Since there is a need for more empirical studies about the recreational nature of hunting, this case study was undertaken to isolate similarities and differences between those individuals who strongly oppose or favor hunting.

METHODS

In an effort to identify individuals who strongly oppose or favor hunting, organizations that advocated each view were contacted. Two presiding officers in each organization were asked to rate their members who strongly oppose or favor hunting in terms of their actions in the organization and participation in outdoor recreation activities (high action tendencies). From these rolls, a random sample was selected. In the sample, there were 21 who strongly oppose hunting and 15 who strongly favor hunting. These individuals were personally interviewed using a semi-structured interviewing technique (Harvey, 1970). This approach was designed to obtain a knowledge (cognitive), feeling (affective), and action (action tendency) commitment and relate to this commitment using "how" and "why" questions. An individual's responses were quantified using developed typologies. The primary problem in the operational use of interview was establishing reliable and valid items that discriminate hierarchical levels of the developed typologies. Experienced workers were consulted for selection of items. These items were pre-tested on a sample population to test for semantic understanding. Items were then adjusted, but the conceptual basis obtained from the experts was maintained.

Interviewers and judges were trained in the use of the interview schedule. A tape recorder was used so the interviewer could concentrate on his interviewing technique and improve his skill through correction by insight. The recorder also allowed a team of 3 experts as a group to examine the information for classification. Minimum criteria for placement on a level was based upon a 2 out of 3 decision by the judges. To aid the judges in the classification procedure, responses from preliminary interviews that characterized each level was used in the training procedures and were available for reference use. Response distribution, where possible, was also used to help establish critical levels in the measurement process.

Reliability of the interview was checked using the attitudinal components in a pre-post design with a four week period between testing phases. Attitudinal components were used in the reliability check because these were elements on which interview commitments were based. A correlation coefficient and a coefficient of determination was used to determine significance, direction, and degree of relationship. A t-test was used for related samples to determine if there was significant difference. There were significant relationships at the 0.001 probability level and no significant difference at the 0.05 probability level on both statistical tests for attitudinal components.

State College, Pennsylvania was selected as the study site because this area has a great number of organizations that represent each end of the continuum. Therefore, individuals could be selected who represented opposing views without a geographical bias being introduced.

The following text and operational definitions were used to clarify ambiguous concepts:

- 1. Action tendency element Disposition to take action, positive or negative, toward an object (Krech et al., 1962).
 - a. High action tendencies Those responses or behaviors that indicate frequent (once a week or greater) action, positive or negative, toward an object (Sonnenfeld, 1966: 74-75).
 - b. Low action tendencies Those responses or behaviors that indicate limited or no action, that is, a tolerance of, an indifference to the existing condition, or a willingness to act in the future, positive or negative, toward an object (Sonnenfeld, 1966: 74-75; Tombaugh, 1971: 75).
- Affective element Feelings, positive or negative, toward an object (Krathwohl et al., 1964: 176-185; Krech et al., 1962: 178).
 - a. High affective element Those responses or behaviors that indicate enough commitment to an object to seek to convert others to the cause or build a philosophy of life based upon the commitment.
 - b. Low affective element Those responses or behaviors that indicate an indifference to or enough commitment to an object to identify with it, to tolerate its presence, attend to it in spite of competing stimuli, or to gain satisfaction from working with it.
- 3. Attitudes An enduring system of positive or negative evaluations, emotional feelings, and pro or con action tendencies with respect to a social object (Krech et al., 1962: 177).
- 4. Cognitive element The beliefs, positive or negative, toward an object (Krech et al., 1962: 178).
 - a. High cognitive element Those responses or behaviors that indicate an ability to evaluate causes and practical, original solutions in terms of established criteria or at least an ability to isolate causes and solutions.
 - b. Low cognitive element Those responses or behaviors that indicate a recall or use of knowledge.

- 5. Expectations An anticipated occurrence of an event. The following characteristics were used to evaluate an anticipated encounter: people; quantity, quality, and diversity of wildlife and habitat; smell; sound; and development.
 - a. No expectations.
 - b. Low expectations Development oriented.
 - c. Medium expectations Development oriented, but still concerned about the environmental quality.
 - d. High expectations --- Wilderness oriented.

Expectations were evaluated using this four point hierarchical scale based on a wilderness-development continuum (Groves and Erickson, 1973).

6. Habits — An acquired behavior pattern regularly followed until it has become almost involuntary.

Habits were evaluated using a subjective scale.

- 7. Marital status
 - a. Single Individuals who are not presently married or living with their spouse (includes widowed, divorced, and separated).
 - b. Married Residual.
- 8. Meaning The importance of land and water resources to an individual.
 - a. Concrete meaning Tangible results of the land being there in its present condition higher taxes, noise from firearms, etc. real.
 - b. Use meaning Utility of the land being there it its present condition hiking, bird watching, etc. rational.
 - c. Emotional meaning Intangible results of the land being there in its present condition aesthetically pleasing, invigorating, etc. emotion.
 - d. Symbolic meaning Intangible results that represent more than is seen; represents or suggests something else freedom, bygone era, etc. abstract.

Meaning was evaluated using a three point negative, neutral, and positive scale (Gibson, 1950).

- 9. Needs The initiating and sustaining force of behavior.
 - a. Physiological, that is, hunger, thirst, etc.
 - b. Safety, that is, security, order, etc.
 - c. Need to belong or to be loved, that is, affection, identification, etc.
 - d. Esteem, that is, prestige, success, etc.
 - e. Self actualization, that is, the desire for self fulfillment, etc.
 - Needs were evaluated using this five point hierarchical scale (Maslow, 1943).

10. Occupation

- a. White collar An individual who:
 - 1. is self-employed and employs at least two workers;
 - 2. receives at least half of his income from profits, fees or commissions;
 - 3. works in an organization that has at least two levels of supervision and is at least the second level, and/or
 - 4. is engaged in activities that require independent or creative outcomes.
- b. Blue collar Residual.
- 11. Residential status
 - a. Resident Five or more continuous years of residence in Centre County.
 - b. Non-resident Residual.
- 12. Selection process styles Perception, organization, and decision making processes; the amount of (1) awareness and (2) rationality used in selection of alternatives.
 - a. Selection process level I low.
 - 1. A familiarity with one type of public forested land or less --- awareness.
 - 2. Selection of alternatives on the basis of chance rationality.
 - b. Selection process level II medium.
 - 1. A familiarity with two types of public forested land.
 - 2. The selection of alternatives on the basis of high risk methods (pay-off or weighted comparisons) and/or influences such as convenience, friends, and habit.

- c. Selection process level III high.
 - 1. A familiarity with three or four types of public forested land.
 - 2. The selection of alternatives on the basis of low risk methods (consequences or regret) and/or influences such as systematic exploration, discussion with professional personnel, quality of habitat and wildlife, and/or experience. (Each selection process level depends upon consistence between awareness and the mode of selection. If there was inconsistence, mode of selection was the factor that determined the selection process level.)

Selection process styles were evaluated using this 3 point hierarchical scale (Bettman, 1971; Green, 1965; Kernan, 1968; Lime, 1971).

- 13. Types of residence
 - a. Rural --- Community with 0-10,000 residents.
 - b. Urban Community with more than 10,000 residents.
- 14. Types of recreational activities
 - Remote Wilderness activities such as hunting, fishing, and hiking that do not require developed facilities.
 - b. Non-remote Residual.
- 15. Types of organizations
 - a. Conservation Those organizations whose objectives include wise management of natural resources.
 - b. Non-conservation Residual.

The data, where possible, were analyzed by chi square. The relationships described are results that deviated significantly from chance expectations (expected frequencies). Significance was determined by large-cell chi square values or marked differences between cell and marginal percentages. In most cases, there was no need for statistical tests because relationships between variables were apparent from the descriptive percentages.

Due to a sparcity of empirical literature regarding sport hunting, preference and use studies were also reviewed to identify relevant variables for exploration. Previous studies have shown that demographic variables, adolescent experience (8-18 years of age), and attitudinal type variables can account for differences in a population. Sonnenfeld (1966) as well as Applegate (1973) emphasized the importance of demographical variables such as residential status, sex, age, marital status, and occupation as determining differences among individuals in the general population. Groves et al. (1970) emphasized not only demographical variables but attitudinal type variables such as knowledge, expectations, etc. as important contributors to differences on this issue. Groves et al. (1972) and Sofranko and Nolan (1970) also stressed adolescent experiences as the major contributor to differences. In this study, an assortment of variables were examined that had been found in previous studies to be potentially significant in determining differences between the groups.

DEMOGRAPHIC VARIABLES

Demographic variables explored were: residential status, sex, marital status, age, and occupation. Sex and occupation were the only two variables that seemed to differ with regard to position on sport hunting. Those who opposed hunting tended to be employed females and those who favored hunting tended to be white collar males. Those who opposed or favored hunting tended to be similar in that they were residents, married, and older (36 years of age or older). These results suggest the importance of sex and the role of occupation in polarizing differences.

When these significant demographic variables are combined with adolescent experience and attitudinal type variables, the results give an indication of important variables for future exploration and what is important in formation of attitudes about hunting.

ADOLESCENT EXPERIENCE

Adolescent experience variables used were: type of residence, type of organizational affiliation, most important recreational activities, occupation of father, and occupation of mother. Variables found to be significant were type of residence, type of recreational activities, and occupation of father. Those who oppose hunting tended to be from urban areas, have participated in non-remote types of activities, and have fathers who were usually white collar workers. Those who favored hunting tended to be from rural areas, participated in remote types of activities, and have fathers who were usually blue collar workers. These results stress the importance of adolescent experience in formation of attitudes. Experiences in later life either reinforce or deinforce the initial development of attitudes.

ATTITUDINAL TYPE VARIABLES

Attitudinal type variables explored were: attitudes, expectations, meaning, needs, types of styles in selecting situational alternatives, and habits. Variables that related to land quality were operationalized in terms of recreational areas in the State College area (26 mile radius), that is public forested land and Game Lands 176. An understanding of this dichotomy permitted focusing on those variables related to similarities and differences between groups because the generalized nature of the differential between hunting and non-hunting lands can be obtained. The action tendency element of attitudes was not evaluated because the sample was selected upon amount of participation in terms of organized and unorganized activities. When these attitudinal dimensions were examined, it was found that there was a great degree of similarity with regard to most attitudinal elements. Both those who oppose or favor sport hunting tended to have (1) high cognitive scores toward public forested land and Game Lands 176, (2) high affective scores toward public forested land and Game Lands 176, (3) high expectations toward public forested lands and Game Lands 176, and (4) a self-actualization need toward public forested land and Game Lands 176. These individuals were also similar in that they were aware of all types of forested land, selected alternatives on the basis of consequences, and their recreational behavior was between 0-25 percent learned. The primary variable in which these individual differed was in meaning of the land. Public forested land has a positive meaning in terms of the concrete, use, emotional, and symbolic dimensions to those who oppose or favor hunting. The difference was with regard to Game Lands 176. Game Lands 176 had a negative meaning in terms of concrete, use, emotional and symbolic dimensions to those who oppose hunting, and a positive meaning to those who favor hunting.

Similarities between these groups in terms of attitudinal elements are overwhelming, indicating that interests and concerns of these individuals are similar. This suggested there may be a possibility of blending the two groups into a unified force for conservation of habitat and wildlife. In situations where a crisis united these two groups, significant gains were made for conservation, whereas when they did not unite resources were endangered.

IMPLICATIONS

Since those who are leaders of a movement are also usually members of an organization, and because a clear understanding of relationships can be obtained by studying the extremities of the continuum, this study was undertaken to isolate similarities and differences between those who strongly oppose or favor hunting in an organizational setting. An assortment of demographic, background, and attitudinal variables were explored. It was found that sex, occupation, the nature of the community lived in during youth, recreational activities participated in during youth, and occupation of father were important variables in determining differences. Those who oppose hunting tended to be employed females, be from an urban background, have participated in non-remote types of activities, and have fathers who were white collar workers. Those who favor hunting tended to be white collar males, be from rural backgrounds, have participated in a remote type of activity, and have fathers who were usually blue collar workers. There also tended to be a difference between the two groups as to the meaning of recreational land. Land associated with hunting activities tended to have negative meaning to those who oppose hunting, and a positive meaning to those who favor hunting. There was a great degree of similarity between the groups, that is, both groups tended to be residents, be married, be 36 years of age or older, have high cognitive scores toward public forested land and Game Lands 176, have high affective scores toward public forested land and Game Lands 176, high expectations toward public forested land and Game Lands 176, have positive meaning toward public forested land, have a self-actualization need toward public forested land and Game Lands 176, usually select recreational alternatives on the basis of consequences, and their recreational behavior was usually between 0-25 percent learned. Results suggest that because of the high degree of similarity between these individuals, these movements could be possibly bonded in terms of objectives and other factors into a common group, thus forming an effective lobby capable of serving the interests of all who are concerned with the wise use of our natural resources. The primary issue separating these two groups is the meaning of recreational experience with regard to use of the resource. Both groups must search and find a compromise that is workable with regard to attitude formation. Reinforcement and deinforcement in later life is a function of sex and occupation. The primary questions raised by this study is what kind of common experiences need to be provided so these groups can move more toward a median position and consolidate their efforts into an effective lobby with regard to utilization of all natural resources. Only with such an approach is there hope for

both groups to achieve their objectives because both have resources the other can use, especially with the new emphasis being placed on resource use.

Implications from this case study are of an abstract and limited nature. The results in no way reflect a cross section of any community except the State College area, but because of the area's unique demographic characteristics, the results do represent a diversity of opinions on the issue of sporting hunting. This study serves to illustrate a problem and should not be construed as a prescription on which to base an entire program in any area without appropriate diagnosis. Much more research is needed to clarify the position of each group to their movement and to find additional types of variables to study.

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