Running head	d: ATTITUDES TOWARDS HUNTING IN LEESBURG DISTRICT	1	
A	ttitudes Towards Hunting in Leesburg District, Loudoun County, <mark>VA</mark>		Commented [CH1]: Incorrect font style. See assignment
	Recreation Research Proposal		guidelines.
	PRM 447 Research and Evaluation in PRM		
	Louie Lumberjack		
	February 20, 2020		

Model Study

Gamborg, C., & Jensen, F. S. (2017). Attitudes towards recreational hunting: A quantitative survey of the general public in Denmark. Journal of Outdoor Recreation and Tourism, 17 (3), 20-28. https://www-sciencedirect-com.libproxy.nau.edu/science/article/pii/S2213078016300792

Abstract

Hunting as a form of outdoor recreation is often a point of debate, but why? Often the reasons that hunting makes the news headlines is due to inappropriate trophy hunting, which is generally considered one of the least accepted reasons to hunt. Other reasons such as hunting for meat, for population control, or for crop protection are usually much more accepted, and also less talked about. Through a survey of Leesburg district in Loudoun County, Virginia, this study aims to determine which reasons for hunting most impact attitudes towards hunting, as well as identify correlations between hunting appreciation and personal relationships with wildlife, hunters, or hunting.

Introduction

Hunting, though still popular outdoor activity in the United States, is not as popular as it once was. Increasing urbanization creates a disconnection and distant admiration of nature, which leads to a lack of support for activities seen as harming wildlife, such as hunting. Rural areas often are much more interconnected with wildlife, and see hunting as a commonly accepted pastime which can be beneficial as a type of wildlife management.

(Gamborg & Jensen, 2017) Virginia is a state split between urban and rural opinions, with an extremely dense urban population in the Northern Virginia area and an increasingly more rural and thinly spread population across the western and southern regions of the

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state. Hunting is fairly common in the more rural areas due to positive attitudes and ample opportunities, but is less common in the Northern Virginia region. Loudoun County is considered to be a fairly urban and progressive-minded area, but does have some access to hunting opportunities unlike the more dense urban counties nearby. This study will seek to determine what the attitudes towards hunting are in the Leesburg district of Loudoun County, and what they are affected by. The research objectives will include considering the impacts of age, urban residence versus rural, the presence of a positive relationship with a hunter or hunting activities, the relationship of individuals with wildlife, and the various reasons that hunters in Virginia may choose to hunt. Through an electronic survey of Leesburg district households, this study will seek to determine if positive relationships with hunters or hunting have a positive impact on attitudes towards hunting, if positive relationships with wildlife have any impact on attitudes towards hunting, and whether obtaining game meat or maintaining population control is a more accepted reason for hunting whitetail deer.

Literature Review

Despite being a relatively popular form of outdoor recreation, there are generally quite mixed opinions about the values associated with recreational hunting. This variety in the attitudes of the general public towards hunting is a multifaceted issue, affected by factors such as relationships with hunting or hunters, relationships with wildlife, or the purpose behind the hunting.

Through a survey of the adult population of Denmark, Gamborg and Jensen (2017) drew several correlations between these factors. The survey results connected to relationships with hunting and hunters revealed that "whereas on average for all

respondents the positive attitude [towards hunting] was 43%, having a hunter in the household increased this percentage to 71%." (Gamborg & Jensen, 2017) These results are supported by a national survey conducted in the United States, also in 2017, which found that "[87%] of respondents ...agreed that it was acceptable to hunt for food whereas 37% agreed that it was acceptable to hunt for a trophy," but "...not knowing a hunter was a statistically significant negative predictor of finding it acceptable to hunt for both reasons; being a hunter was positively related to agreeing with both reasons." (Byrd, Lee, & Widmar, 2017) This shows that despite other relevant factors such as one's relationship with wildlife or the reasons behind a hunting activity, a positive relationship with hunting or with a hunter is likely to generate positive feelings towards hunting.

In regards to the impact of one's relationship with wildlife on one's attitudes towards hunting, Gamborg and Jensen concluded that "the fact there are more people with a distanced wildlife value orientation might introduce greater indifference to hunting," which may lead to a decline in support of hunting activities, and that "...urbanization might encourage more negative attitudes among the general public to recreational hunting if there are more people with a mutualist wildlife value orientation." The study defined a mutualist wildlife value orientation to be a view centered around the feeling that "the coexistence of humans and animals to be fundamental, in a kind of community," which tends to be more common in urban areas, as opposed to the utilitarian orientation found more in rural areas which is defined as a belief that "wildlife should be used... and managed primarily for the benefit of humans," The study also defines two other value orientations: a pluralist orientation which encompasses both the mutualist and utilitarian views, and a distanced orientation which does not hold any particular value orientation due to a general

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lack of interest in wildlife. (Gamborg & Jensen, 2017) Using these four value classifications, the study was able to determine that "...respondents with a 'mutualist' orientation had a more negative attitude [towards hunting] (39%) than any of the other orientations," while "'Utilitarians' and 'pluralists' had the most positive attitudes towards recreational hunting (61% and 65%, respectively)." (Gamborg & Jensen, 2017) These results not only imply that a person's attitude towards hunting is indeed linked with their relationship with wildlife, it also lends a helpful framework of value orientations to define different specific relationships with wildlife that can be applied to other relevant data.

For example, in a 2013 article, Hicks notes that "particularly in urban areas, more and more people prefer non-consumptive to consumptive wildlife recreation," and that "Since the 1970s, hunting participation has declined while wildlife viewing has increased," (Hicks J., 2013, p. 14) which could be summarized as a steady shift from a utilitarian to a mutualist general orientation towards wildlife in urban areas of the United States. Hicks goes on to perfectly exemplify the dichotomy of a pluralistic orientation as well, observing that "most people genuinely enjoy seeing deer at their local forest preserve," but "seeing one through your car's windshield is far less appealing." (Hicks J., 2013) He expanded on this concept further in a 2017 interview of twelve parks and recreation managers in Illinois who had experienced many varied interactions with deer, finding that generally the managers' positive feelings towards deer rose from them being a known and beloved symbol for nature, as innocent, herbivorous, vulnerable wildlife, while the more negative feelings overwhelmingly had to do with experiences with deer-related vehicle accidents or anxiety over deer frequently grazing or crossing around roadways. (Hicks J. R., 2017) In other words, people—even natural resource managers—with a pluralist orientation can

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appreciate wildlife to an extent, but may only do so in the appropriate context and will find the same wildlife they considered valuable in a wild scenario to be a pest if they encounter the species performing bothersome behaviors or entering what they deem to be inappropriate territory. Despite the negative aspects, this type of general pluralistic view can actually be healthy for a community because it opens room for conversation about balancing the needs of the human residents with the needs of the local wildlife in a mutually beneficial way. Hicks addresses a situation in which this balance was realized: a community was frustrated with flooding issues generated by the local beaver population, but thanks to their generally pluralistic community orientation the authorities responsible for public outreach on the issue were able to determine through "respectful dialogue that the public doesn't hate beavers, they just hate flooding." With this insight a mutually beneficial solution was found. Some drainage pipes were placed in the dam area, the flooding subsided and the beavers were able to retain their habitat. (Hicks J., 2013, p. 15) This is a great example of how a pluralistic orientation may be applied to attitudes towards hunting, because many times people appreciate wildlife but are also bothered by wildliferelated inconveniences, and will appreciate the populations being managed as responsibly as possible.

Population management is just one example of reasons to hunt. In fact, a great deal of the variation in attitudes towards hunting has to do with the different reasons that people hunt. The most common reasons include hunting to "obtain food, trophy hunting, wildlife population control, reduce predator population, and control crop damage." (Byrd, Lee, & Widmar, 2017) In the survey conducted by Byrd, Lee, and Widmar, the results found that "87% of respondents agreed with hunting to obtain food [as] the most widely accepted

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reason included in the survey," followed by, "wildlife population control with 72% of respondents selecting agree, ... 66% that agreed with hunting to reduce a predator population, [63%] of respondents agreed with hunting to control crop damage... [and] only 37% of respondents agreed with trophy hunting being acceptable," (Byrd, Lee, & Widmar, 2017) Gamborg and Jensen found similar results, sharing that in the United States, "approval rates for hunting for meat were more than 80%, rates for hunting for recreation and meat were a little more than 60%, and rates for hunting purely for recreation or sport were below 40%." (2017) With species considered to be the paradox of a beloved pest, such as the whitetail deer, meat is a valuable reason but population management is the key reason for hunting programs, as often "hunting is the primary management tool for [such] species..." (Byrd, Lee, & Widmar, 2017) In a 2019 survey of registered Virginia hunters, the most importance was placed on hunting deer and turkeys out of a list of twelve types of game species, with 94.1% of respondents choosing one of the three options ranging from moderate to extremely important, largely for wildlife management purposes.

Methodology

1. Identify the category of research design used.

Pre-experimental

2. Identify if this is applied or basic research and why.

This study would be basic research, because it is seeking to add to existing correlational data connecting public hunting attitudes with public opinions of specific game species, opinions of different hunting methods, opinions of acceptable reasons for hunting, ownership of a pets, association levels with hunters, and rural versus urban residential areas.

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3. Describe where the study would take place.

Leesburg District located in Loudoun County, VA.

4. Describe the data collection method.

A postcard will be created with a link to a surveymonkey.com survey consisting of a 10-item electronic questionnaire. 397 postcards will be sent out to a random selection of addresses in the Leesburg district of Loudoun County, VA. After two weeks, a round of reminder postcards will be printed and sent out to all respondents who haven't completed the questionnaire.

5. Describe the population and population size.

The population for this proposed study is the reported residents of the Leesburg district of Loudoun County, Virginia. Since the survey invitations will be distributed by mail, the population of **47,395 Leesburg district residents** (United States Census Bureau, 2018) will be addressed by household groups.

6. Sample selection method and sample size.

7. Describe your margin of error.

The margin of error is +/-5%.

8. Describe how data would be analyzed.

Socio-demographic information such as age and urban or rural area of residence will be tested for "representativeness and for variation in the proportions of different attitudes associated with the investigated independent variables," using Chi²-tests.

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Attitudes towards hunting will be measured using "a 5-point attitudinal scale ranging across 'Very negative', 'Somewhat negative', 'Neither/nor', 'Somewhat positive' and 'Very positive'. In the analyses with the independent variables, the original five-point scale [will be] merged into a three-point scale with the options 'Negative', 'Neither/nor' and 'Positive'," with "Analyses of variance, t-tests were used to test the impact of different hunting [reasons] on overall attitudes towards recreational hunting." and "four [wildlife value] orientations [will be used] on the basis of a scoring of pre-determined combinations of answers on a 7-point Likert scale (from strongly disagree to strongly agree) to 10 statements about wildlife use, [attitudes towards wildlife], and hunting." (Gamborg & Jensen, 2017)

Pro Forma Budget

Project Expenses		
Project Director	Design postcard & survey, handle sampling procedure, final analysis	\$1,000.00
Project Assistant	Help with mailing and data compilation	\$250
Total Payroll		\$1,250.00
Social Security and Medicare	0.0765 x Total Payroll	\$95.62
Worker's Compensation	0.01 x Total Payroll	\$12.50
Unemployment Compensation Fund	0.017 x Total Payroll	\$21.25
Virginia State Withholding	0.02 x Total Payroll	\$25.00
Printing @ Office Depot	(400 bulk postcards = \$111.92 x 2) + Final Report (\$0.74 x 10 pages)	\$231.39
Mailing	\$0.35 x 794	\$277.16
Total Expenses		\$1,914.40

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References

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