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## **Hunting and Illegal Violence Against Humans and Other Animals: Exploring the Relationship**

### ABSTRACT

This study examined the relationship between hunting and illegal violence among college males. Although similar on many socio-demographic characteristics such as age and social class (parents' education and occupation), hunters were more likely than non-hunters to be white and Protestant. They also were more likely to have grown up with a family member who hunted. Hunters were about twice as likely to have been violent toward nonhuman animals; however, one type of violence—killing wild or stray animals—accounted for this difference. Regarding violence toward people, hunters were more than twice as likely to have damaged or destroyed private or public property during their last year in high school but were no more likely during that year to have fought with other persons. Thus, at least for this sample, hunting related to harming animals in the wild and to property damage but not to other forms of animal abuse or violence against humans. This paper discusses possible explanations for this result and limitations of the study.

Hunting has enjoyed a long history of legal and normative support in this country. In the last quarter of a century, however, both hunting and support for hunting have declined (Herzog, Rowan, & Kassow, 2001; Irwin, 2001). As of 1999, there were 15.1 million paid hunting license holders, compared with 17.1 million in 1975 (Irwin). According to the National

Opinion Research Center, the percentage of married men (the predominant group of hunters) who hunt has fallen from 33% in 1975 to 20% in 1995 (Herzog, et al., 2001).

Some of the factors that have contributed to this decline are structural, such as less leisure time and less acreage on which hunting is permitted. Yet, normative support for hunting also has diminished in recent years. Whereas nearly two-thirds of American adults approved of sport hunting in the 1970s, a majority now opposes the practice (Irwin, 2001). It probably is not coincidental that the same period in which hunting's popularity has suffered is associated with the rise of the modern animal rights movement.

Animal rights activists and many feminists (particularly ecofeminists) have argued that hunting is another form of violence and another example of male domination and oppression (Adams, 1995; Kheel, 1995). Anecdotal data from advocates for battered women suggest a link between woman-battering and hunting (Adams, 1995), reinforcing this view of hunting as not only a recreational activity but also as an act of violence toward nonhuman animals that may be associated with other expressions of violence against humans and other animals.

The notion that legal violence, such as hunting, may spill over into illegal violence is not new. Straus (1991, 1994) has proposed such a spillover theory to explain the host of negative, antisocial outcomes associated with receiving corporal punishment—a socially legitimate practice—as a child. In fact, one study has shown that corporal punishment relates to violence toward animals. Flynn (1999) found that the more often males were spanked in childhood by their fathers, the more likely they were to have committed animal cruelty. Similarly, the experience of killing animals via hunting while growing up could lead some individuals to approve of, and use, violence in culturally illegitimate ways.

With regard to the link between hunting and violence, the limited evidence is mixed and inconclusive. Studies by Clifton (1994a; 1994b) revealed a positive association between hunting licenses and violent crimes in two states: child sexual assault in New York and all categories of child abuse in Ohio. Yet, Eskridge (1986), using data from all 50 states, found exactly the opposite result: Namely, as the ratio of citizens with hunting licenses increased,

the rates of violent crimes (rape, murder, robbery, and assault) decreased or were unaffected.

Adair (1995) argues that the above studies contain flawed methodology and, consequently, contribute little to determining the relationship between hunting and violence. The studies by Clifton inadequately control for population density, while Eskridge's sample size is so large as to produce results that, although statistically significant, may have little substantive value. Consequently, there is a need for solid, empirical research to address this question.

Finally, Ascione (1993) has suggested that committing animal abuse in childhood may interfere with the development of empathy. It seems reasonable that killing animals while hunting also could lead to a lack of concern and kindness toward other beings. Given that most hunters, like animal abusers, are male, and that male socialization focuses on dominance and aggression while minimizing empathy (Coltrane, 1998), such an outcome seems particularly likely.

This exploratory study has two purposes: (a) to examine the association between hunting as a child and/or teenager and engaging in violent behaviors toward humans and other animals and (b) to see if hunting relates to lower levels of empathy.

Using a sample of college students, we tested the following hypotheses:

1. Those who hunted in childhood will be more likely to have committed acts of violence against both humans and other animals.
2. Those who have hunted will have lower levels of empathy than those who have not.

## **Data Collection and Variables**

### *Sample*

A total of 236 college undergraduates from a public southeastern university comprised the sample. Students in seven sections of "American National Government," an introductory political science class, completed questionnaires examining their experiences with hunting while growing up and their

attitudes toward, and experiences with, interpersonal violence. Other relevant attitudinal and sociodemographic data were collected. The survey took approximately 25 minutes to complete. The students' participation was voluntary, and their responses were anonymous.

### *Variables*

*Hunting experience.* Respondents answered yes or no to the question, "Have you ever been hunting?" Respondents also were asked whether they had ever killed an animal while hunting.

*Animal abuse.* The study measured this variable by asking respondents whether they had committed any of the following five acts against an animal: (a) killed a pet, (b) killed a stray or wild animal, (c) hurt or tortured a pet to tease or cause pain, (d) hurt or tortured a wild or stray animal to tease or cause pain, or (e) touched an animal sexually or engaged in sex acts with an animal. Respondents were instructed not to count animals killed for food (farm animals), while hunting, or to help the animal who was hurt, old or sick (mercy killing). If they said "yes" to having committed at least one of the above acts, then they were considered to have perpetrated animal abuse.

*Violence to humans.* Students were asked a series of questions about risky (had sex, got drunk) or antisocial (stealing, damaging property) actions they may have committed during their last year in high school. Two items were relevant to the present study. As a measure of indirect violence toward others, respondents were asked whether they had purposely damaged or destroyed public or private property that did not belong to them. As a measure of direct violence toward humans, respondents were asked whether they ever got into physical fights with kids who were not part of their family. Both items were dichotomous, and both were restricted to the respondent's senior year in high school.

In addition, four questions were asked about committing violence in dating relationships. Two questions asked about physical violence (mild and severe) and two questions asked about sexual violence (tried to force or did force sex on dating partner). However, only three male respondents admitted to engaging in any of these behaviors, and thus no analyses concerning dating violence were possible.

*Empathy.* Following Davis (1994), empathy is conceptualized as multidimensional construct, consisting of both cognitive and affective components. Two measures of empathy were obtained using two subscales from Davis' Interpersonal Reactivity Index (Davis, 1994). The "perspective taking" scale was used as a measure of cognitive empathy. According to Davis, it "measures the reported tendency to spontaneously adopt the psychological point of view of others in everyday life" (pp. 56-57). The "empathic concern" scale was used as a measure of emotional empathy. This scale "assesses the tendency to experience feelings of sympathy and compassion for unfortunate others" (p. 57). Each subscale consisted of seven items, with possible responses ranging from zero ("does not describe me well") to four ("describes me very well"). Total scores on each scale ranged from 0 to 28, with a higher score indicating greater empathy.

## Results

### *Gender differences*

There were significant differences between males and females on virtually all of the variables of interest in this study (see Table 1). Nearly half of all males—45.7%—had been hunting at least once, compared with only 9.5% of females. Even more telling, three fourths of the males who had been hunting had killed an animal while hunting, while only 2 of the thirteen females who had hunted had ever killed an animal while hunting.

**Table 1. Gender Differences on Variables of Interest**

	<b>Males</b> <i>(n=94)</i>	<b>Females</b> <i>(n=137)</i>	$\chi^2$	<i>p</i>
Ever hunted	45.7	9.5	39.9	.001
Perpetrated animal abuse	28.7	3.9	27.3	.001
Damaged/destroyed property	31.2	7.9	27.7	.001
Physical fights with others	28.1	7.1	19.0	.001
<i>Empathy</i>			<i>t</i>	
Empathic Concern	18.6	21.8	5.25	.001
Perspective Taking	17.3	17.2	.21	.833

Gender differences also were apparent regarding violent behaviors. Male respondents were seven times more likely than females to have harmed or killed animals. Almost three of ten males—28.7%—had committed at least one act of violence against an animal. The comparable percentage for females was 3.9%.

Males also were much more likely to engage in violent actions—both direct and indirect—toward human beings. Male respondents were approximately four times more likely to report damaging or destroying someone else's property during their last year in high school. A little more than 30% of males (31.25%), but only 7.9% of females, engaged in this form of indirect violence. Males also were four times more likely to have engaged in physical fights with others during their senior year, with 28.1% of males, but only 7.1% of females, reporting having done so.

Finally, regarding empathy, females scored significantly higher than males on emotional empathy,  $t(234) = 5.25, p < .001$ . However, there was no gender difference in cognitive empathy,  $t(234) = .21, p = .8333$ . Given the small percentage of females who had hunted and had committed acts of violence, the remaining analyses are limited to the males in the sample.

### *Hunters—Characteristics and Experiences*

*Hunters versus non-hunters.* Nearly half of the male respondents—46.2%—had been hunting at least once. Overall, however, there were few socio-demographic differences between hunters and non-hunters (see Table 2). Differences were observed in three areas: race, religion, and hunting socialization. Ninety-three % of those who had hunted were white, whereas one-third of those who had not hunted were nonwhite. Hunters also were more likely to be Protestant—82.5% versus 68.1%. Finally, while five out of six hunters reported that during their childhood someone in their family hunted, only one-fourth of non-hunters grew up with a family member who had hunted.

In other areas, hunters and non-hunters were quite similar. On average, non-hunters were about one year older than hunters—21.3 years versus 20.3 years. More than 70% of respondents in both groups reported that in their senior year in high school their parents were still married. There also were

**Table 2. Hunting Sociodemographic Variables—Male Hunters vs. Non-hunters**

	<b>Hunters (n=43)</b>	<b>Non-hunters (n=51)</b>
<b>Age (mean)</b>	20.3	21.3
<b>Race</b>		
White	93.0%	66.7%
African American	4.6	21.6
Other	2.3	11.8
<b>Religious Affiliation</b>		
Protestant	82.5	68.1
Catholic	5.0	12.8
Jewish	0.0	0.0
Other	5.0	10.6
None	7.5	8.5
<b>Parents Marital Status when H.S. senior</b>		
Married	73.8	72.0
Divorced/Widowed	26.2	28.0
<b>Father's Education</b>		
Less than high school	4.8	2.0
High school/some college	42.9	44.9
College grad. or higher	52.4	53.1
<b>Mother's Education</b>		
Less than high school	7.0	8.0
High school/some college	46.5	58.0
College grad. or higher	46.5	34.0
<b>Father's Occupation</b>		
Blue collar	31.0	38.8
White collar	69.0	61.2
<b>Mother's Occupation</b>		
Not employed	7.0	12.0
Blue collar	20.9	20.0
White collar	72.1	68.0
<i>Family member hunted during childhood</i>	83.7	26.0

few differences in parents' education or occupation. Fathers' education level was virtually identical between the two groups, with slightly more than half of fathers in both groups having at least a college degree. Fathers of hunters were somewhat more likely to be white-collar workers—69% to 61.2%. Among mothers, those of hunters were slightly more educated, but maternal occupation levels were very similar.

*Hunters' experiences.* Table 3 presents descriptive data on the experiences of the hunters. One fifth of the hunters had been hunting only once in their lives, and two others had hunted only twice. More than half the sample had been hunting six or more times, and 3 of 10 hunters reported hunting more than 20 times.

Almost all hunters—58.1%—were between the ages of 6 and 12 the first time they went hunting. Three of 10 were teenagers, and 9.3% were under age 6 when they had their initial hunting experience. Typically, their father took them hunting the first time (44.2%) or a relative other than their grandfather (23.3%). They also reported initially being taken hunting by a child friend (18.6%), an adult friend (11.6%), or their grandfather (11.6%).

**Table 3. Descriptive Data on Hunting Experiences**

No. of times hunted	<i>n</i>	%
Once	9	20.9
Twice	2	4.6
3-5 times	9	20.9
6-10 times	4	9.3
11-20 times	6	14.0
Over 20 times	13	30.2
Age first time hunting	<i>n</i>	%
Under 6	4	9.3
6 to 12	25	58.1
13 to 18	13	30.2
Over 18	1	2.3
Who took first time <sup>a</sup>	<i>n</i>	%
Father/stepfather	19	44.2
Mother/stepmother	1	2.3
Grandfather	5	11.6
Other relative	10	23.3

Table 3 (cont.)

Adult friend	5	11.6
Child friend	8	18.6
Other	3	7.0
Type of animal hunted <sup>a</sup>	<i>n</i>	%
Birds	27	64.3
Rabbits	18	42.9
Squirrel	29	69.0
Deer	31	73.8
Fox	6	14.3
Turkey	15	35.7
Other	5	11.9
Age first time killed animal <sup>b</sup>	<i>n</i>	%
Under 6	1	3.1
6 to 12	21	65.6
13 to 18	9	28.1
Over 18	1	3.1
Type of animal killed <sup>a</sup>	<i>n</i>	%
Birds	24	75.0
Rabbits	12	37.5
Squirrel	25	78.1
Deer	15	46.9
Fox	4	12.5
Turkey	8	25.0
Other	5	15.6
No. of animals killed in lifetime	<i>n</i>	%
One	4	12.5
Two	1	3.1
3 to 5	8	25.0
6 to 10	4	12.5
11 to 20	3	9.4
Over 20	12	37.4
How old last time hunted	<i>n</i>	%
6 to 12	6	13.6
13 to 18	23	52.3
Over 18	15	34.1

<sup>a</sup> Due to multiple responses, percentages total to greater than 100%.

<sup>b</sup> Eleven hunters had never killed an animal while hunting.

When asked the types of animals they had hunted, the most common responses were deer (73.8%), squirrels (69.0%), and birds (64.3%). Approximately 43 percent had hunted rabbits, and 35.7% had been turkey hunting.

Not all those who had been hunting had actually killed an animal. Approximately one-fourth of those who had hunted reported never killing an animal. Of the remaining hunters, 37.4% said they had killed more than 20 animals. Approximately 22% had killed between 6 and 20, while one-fourth had killed 3 to 5 animals, and 15.6% had killed one or two.

Almost two-thirds were between the ages of six and twelve the first time they killed an animal, while 28.1% were teenagers. Only one respondent was under six the first time he killed an animal while hunting.

In general, the animals who most often were hunted—squirrels, birds, and deer—were also the most likely ones killed. However, they appeared to have greater “success” with squirrels and birds than with deer. Squirrels (78%) and birds (75.0%) were the animals most commonly reported killed. Deer, whom nearly three-fourths of hunters had reported hunting, had been killed by 46.9%.

### *Hunting and Violence Against Animals and Humans*

*Animal abuse.* The first question examined the bivariate relationship between hunting and harming animals. Table 4 gives the percentages of hunters and non-hunters who committed each of the five types of violence toward animals. Overall, hunters were nearly twice as likely to have perpetrated violence against an animal as were non-hunters: 39.5% versus 20.0% ( $\chi^2 = 4.28$ ,  $p = .039$ ). One type of abuse—killing a stray or wild animal—accounts for most of this disparity. Only 8% of non-hunters had engaged in this behavior; 34.9% of hunters had done so. When defining hunters as only those who have killed an animal hunting, then the relationship is even stronger (see Table 5). Nearly half (48.4%) of those who had killed an animal hunting reported committing at least one act of animal abuse, whereas slightly fewer than one-fifth of those who had never killed an animal hunting had engaged in animal abuse ( $\chi^2 = 8.17$ ,  $p = .004$ ).

*Violence toward humans—indirect and direct.* Respondents were asked about two actions during their last year of high school: (a) whether they had dam-

**Table 4. Relationship between Hunting and Animal Abuse**

	Hunters ( <i>n</i> =43)	Non-hunters ( <i>n</i> =51)
<b>Type of Violence Perpetrated</b>		
Killed a pet	0.0	2.0
Killed a stray or wild animal	34.9	8.0
Hurt or tortured a pet	7.0	12.0
Hurt or tortured a wild animal	11.6	10.0
Had sexual acts with an animal	0.0	2.0
<i>Perpetrated Any Violence against Animals</i>	39.5	20.0

**Table 5. Relationship between Hunting and Illegal Violence—Hunter vs. Non-hunters and Killed Animal Hunting vs. Never Killed Animal Hunting**

	Hunters ( <i>n</i> =43)	Non-hunters ( <i>n</i> =51)	<i>p</i>	Never Killed ( <i>n</i> =31)	Never Killed ( <i>n</i> =61)	<i>p</i>
<i>Ever Committed Violence Against Animals</i>	39.5	20.0	.039	48.4	19.7	.004
<i>Actions during last year of high school</i>						
Destroyed/Damaged property	44.2	19.6	.010	54.8	19.4	.001
Physical fights with others	30.2	25.5	.609	29.0	27.4	.870

aged or destroyed someone else’s property—a form of indirect violence against others—and (b) whether they had gotten into physical fights with other kids—a measure of direct violence (see Table 5). Hunters were more than twice as likely to have damaged or destroyed property that did not belong to them—44.2% versus 19.6% ( $\chi^2 = 6.61, p = .010$ ). When hunters are limited only to those who have killed an animal while hunting, the difference is even greater—54.8% versus 20.0% ( $\chi^2 = 12.13, p = .001$ ).

However, there was no difference between hunters and non-hunters in the incidence of fighting with others. Three out of 10 hunters and 1 out of 4 non-hunters reported getting into fights with others during their senior year of high school ( $\chi^2 = .26, p = .609$ ). When hunters are restricted to just those who have killed an animal while hunting, there is still no difference ( $\chi^2 = .03, p = .870$ ).

## Empathy

There was no difference between hunters and non-hunters regarding emotional empathy. The means of hunters and non-hunters on the empathic concern scale were 18.19 and 19.02, respectively ( $p = .3374$ ). On the perspective taking scale, the difference approached statistical significance, with hunters expressing less cognitive empathy. The mean score for hunters was 16.16, while non-hunters averaged 18.10 ( $p = .0730$ ).

## Regression Analyses

Since hunters differed from non-hunters with respect to race, religion, and hunting socialization, it is possible that the observed bivariate relationships observed above will be due to these variables and not to the independent variable. Therefore, the study ran two separate regression analyses for each of the significant dependent variables—animal abuse and damaged/destroyed property. In the first model of each group, the hunting was operationalized as whether the respondent had ever been hunting. The second model defined hunting as whether the respondent had ever killed an animal hunting. The control variables were race—coded as white/nonwhite; religion—coded as Protestant/all others; and family member hunted during respondent's childhood—coded yes/no. Table 6 presents the results of these four analyses.

*Animal abuse.* After controlling for race, religion, and hunting socialization, hunters still were significantly more likely to perpetrate violence toward ani-

**Table 6. Regression Analyses of Hunting Variables for Harming Animals and Damaging Property (Standardized Coefficients)**

	<i>Harmed Animals</i>				<i>Damaged Property</i>			
	$\beta$	$p$	$\beta$	$p$	$\beta$	$p$	$\beta$	$p$
Hunter	.318	.013	-	-	.173	.176	-	-
Killed Hunting	-	-	.378	.001	-	-	.305	.008
White	-.220	.048	-.210	.051	.228	.043	.223	.039
Protestant	.204	.060	.214	.044	.126	.249	.132	.214
Family Member Hunted	-.162	.204	-.152	.191	-.029	.819	-.066	.568

Note: For harmed animal analysis,  $n = 86$ ; for damaged property,  $n = 85$ .

mals than non-hunters ( $p = .013$ ). When examining the other variables in the model, nonwhites were more likely to engage in violence to animals than whites, and Protestants were more likely than non-Protestants to do so, although statistical significance was barely missed ( $p = .06$ ). Having a family member who hunted during one's childhood was not related to abusing animals.

When hunting is defined as having killed an animal, then hunting is even a more powerful predictor of harming animals ( $p = .001$ ). Being nonwhite and Protestant are still related to perpetrating violence against an animal.

*Property damage.* After considering the control variables, hunting no longer is significantly related to damaging or destroying other's property ( $p = .176$ ). The only significant predictor was race, with whites being more likely to damage someone else's property. However, when hunting is defined as having killed an animal while hunting, then it is a significant predictor ( $p = .008$ ). In this model, whites still are more likely than nonwhites to have committed property damage.

## Discussion

As expected, hunters were approximately twice as likely to engage in violence toward animals as non-hunters. Four of 10 male respondents who had been hunting had committed an act of violence against an animal; among those who had never hunted, only 2 of 10 had abused animals. When "hunters" included only those who had killed an animal, almost half reported having perpetrated animal abuse. This relationship held after controlling for three variables on which hunters and non-hunters differed—race, religion, and a family member who had hunted during the respondent's childhood.

However, the main type of violence that accounted for this difference was killing a wild or stray animal. With regard to the other types of animal abuse, hunters were no more likely, and in some cases, less likely to have perpetrated them. Although higher rates of animal abuse by non-hunters in any area were unexpected, these differences were not statistically significant, and we should view them cautiously due to the small number of respondents in each category. Nevertheless, these findings indicate it is premature to link hunting with animal abuse *per se*.

The operationalization of animal abuse may be problematic for this population. By definition, hunters kill animals in the wild. In their minds, killing other animals in the wild who are not the intended target of the hunt, may be seen very differently compared to torturing or killing a pet and not be perceived as “abuse” by hunters. Additionally, hunters may be quite similar to most individuals in their ability to compartmentalize their attitudes, and thus treatment, toward other animals. As hunting lore suggests, hunters may be very capable of showing great affection for their hunting dogs or pets, while at the same time gaining great pleasure from shooting a deer. In many ways, this contradictory view of animals is the most consistent quality in humans’ thinking about other animals (Arluke & Sanders, 1996). Thus, based on the findings of this study, it seems more accurate to link hunting with illegal behavior—killing non-game designated animals—as opposed to animal abuse.

The attitudes of hunters toward animals may make it easier to kill them legally—while hunting—as well as illegally. It seems likely that those who kill animals for sport would be more likely to view animals as objects or tools, or at least as inferior to humans, whereas non-hunters may be more willing to view animals in more subjective and individualistic terms. In fact, among this sample, hunters were significantly more likely to disagree with the statement, “Animals should have the same moral rights as human beings do.” Approximately half of hunters (48.8%) either disagreed or strongly disagreed with this statement, compared with only one-fourth of non-hunters (27.4%),  $\chi^2$  (1 df) = 4.57,  $p = .033$ . If other animals are viewed in a more impersonal, objectified way, then physically harming or killing them, whether hunting or not, may be more likely.

Other factors make hunters’ killing of animals in the wild a likely occurrence. One is opportunity. Although there is no way to tell if the animal abuse occurred while hunting, certainly the private, secluded setting would facilitate such action. Secondly, obviously the ready accessibility of guns also would make committing violence toward animals easier. Finally, Arluke and Luke (1997) have noted that adolescents often commit animal cruelty with peers, perhaps as a way to gain approval and to prove one’s masculinity. Since hunting is overwhelmingly a male activity, it may be that youth who hunt are more stereotypically masculine and, thus, may be killing animals in socially

acceptable as well as unacceptable ways in order to validate their masculinity to themselves and to others.

Hunters in the present sample also were more than twice as likely as non-hunters to report that they had damaged or destroyed someone else's property while a senior in high school. As with animal abuse, when defining hunting as having killed an animal, the relationship was even stronger. After controlling for sociodemographic variables, the significance of this relationship disappeared when "having ever hunted" was the independent variable but remained significant when we used "ever killed an animal hunting."

This type of indirect violence against humans is important because of its potential theoretical link to violence against animals. If animals are harmed—at least in part because they are viewed as unworthy of moral consideration and, thus, more like objects—then there may be little distinction between destroying someone's property and hurting or killing an animal. It also may be that, like hunting, vandalism is predominantly a male activity that provides an opportunity for destruction of property—both living and nonliving—because of such factors as peer-related masculinity tests.

Even though it took killing animals, rather than just "going hunting" to produce significance in the full model, hunting still may be a marker of destructive behavior in adolescent males. Nearly half of those who had been hunting had damaged another person's property while a senior in high school.

However, hunters were no more prone to get into physical fights as high school seniors than were non-hunters. This was true whether we defined hunting as going hunting or killing an animal. For this sample, there was no direct link between socially sanctioned violence against animals and violence against humans.

In sum, the findings from this study provide evidence for a relationship between hunting and illegal aggression or violence—killing stray or wild animals and damaging the property of humans—but not between hunting and interpersonal violence. Why might hunting lead to killing other animals in the wild and property damage but not to violence against other humans? First, the normative support for hunting, especially in the South, may operate to minimize any spillover from killing animals to human interpersonal violence. Unlike corporal punishment, in which receiving socially legitimate

violence often spills over into engaging in socially illegitimate violence (Straus, 1991, 1994), the same did not happen with hunting. However, unlike spanking, in which children are “victims” of legal violence from other humans and have no control over its infliction, hunters are employers of legal violence against non-human targets over whom they have complete control.

Another possibility may relate to social distance of the targets of aggression. Killing animals for sport only may make it easier to inflict damage onto more socially distant victims. In this study, the animals whom hunters victimized were stray or wild animals—animals who are not as valued as companion animals and, thus, more distant from the collective social community. Similarly, damaging the property of humans is a form of aggression that harms its victims only indirectly, from a distance.

Relatedly, hunting provides the opportunity to employ safe, legitimate violence (from the hunter’s perspective). Thus, it only may be “safe, illegitimate violence”—killing animals in the wild and destruction of property—that hunting engenders. Perpetrators of interpersonal violence often choose the smaller and less powerful as victims. In the current study, the measure of violence was one involving relatively equal participants—fighting other youth. Unfortunately, because respondents reported committing virtually no dating violence, we were unable to determine whether hunting relates to violence against other humans when the victims are less powerful physically and/or socially.

Clearly, gender is an important variable in this research. Overwhelmingly, males engaged all the activities investigated—hunting, animal abuse, damaging property, fighting with others. It has long been thought that male socialization, with its emphasis on dominance and aggression, inhibits the development of emotional empathy. Apparently, hunting has no additional impact on this gender disparity. In this sample, females had much greater empathic concern, that is, sympathy and compassion for unfortunate others, than did males—whether or not they hunted.

There are several limitations to this research. First, the size of the sample is relatively small, which suggests that we should consider cautiously any conclusions. Second, this study examined only one type of interpersonal vio-

lence against other humans—physical fights during one’s last year in high school. Since virtually no respondents admitted to engaging in dating violence, we could not examine its relationship to hunting. Whether other forms of violence against humans are related to hunting needs to be the subject of future research.

Third, we carried out this research in the South, where hunting still enjoys great popularity, is a rich tradition, and where more traditional definitions of masculinity may exist. It would be interesting to see whether studies in other regions would produce different results.

Finally, and perhaps most important, this was a study of the hunting experiences of college students, not serious, long-term hunters. If there is any relationship between hunting and engaging in interpersonal violence, it may require hunting over many years before seeing its effect. If so, such a relationship more likely might be revealed in other regions where hunting is less practiced and less valued.

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