

# Comparing Shame and Embarrassment to Traditional Deterrents to Hunting Violations

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*Abstract:* Past research has shown that feelings of shame and embarrassment act as deterrents to criminal activity such as drunk driving. This research compares responses of 2 groups of hunters to questions about shame, embarrassment, the certainty of getting caught in a wildlife violation, and the impact of legal sanctions for wildlife violations. Oklahoma hunters who reported they would experience high levels of shame and embarrassment if they committed a hunting violation said they would be less likely to commit a hunting violation in the future ( $P < 0.01$ ). There was no significant relationship between any of 5 traditional legal sanctions and hunters' likelihood of committing a future violation.

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Natural resource agencies throughout the United States have the task of managing the wildlife resources in their respective states. Part of that management responsibility is the enforcement of hunting and fishing laws. According to Hall (1992), America's 17 million hunters outnumber wildlife enforcement officers by approximately 9,000 to 1. With this limited ability for officers to actively catch and prosecute violators, any strategies or techniques to deter hunters from committing wildlife violations could have a major impact on wildlife populations. Since the Oklahoma Department of Wildlife Conservation (ODWC) has only 123 game wardens to enforce the hunting and fishing laws of Oklahoma and over 400,000 licensed hunters and fishermen in the state (ODWC 1994), it is clear that the agency must be able to use its employees in the most effective and efficient manner possible.

This research is intended to explore and compare attitudes of hunters who have been cited and convicted of more than 1 hunting violation and their responses to questions about legal sanctions (such as confinement, fines, and confiscations), non-legal sanctions (such as subjecting a violator to embarrassment), the certainty of getting caught committing a wildlife violation, and likelihood of their committing a future violation.

Virtually none of the literature concerning criminal behavior and compliance with the law addresses wildlife law (Beattie et al. 1997). There are, however, some

studies involving deterrence and some other crimes such as drunk driving, littering, and tax compliance (as opposed to violent crimes such as murder and robbery). This research will examine whether factors affecting compliance in other violations can be applied to violations of hunting laws.

The traditional deterrence theory from the fields of criminology holds that deterrence is based on the certainty, severity, and celerity or swiftness of punishment. In the past, this theory was applied to legal sanctions only. However, several authors (Meier et al. 1984, Williams and Hawkins 1986, Grasmick and Bursik 1990) have argued that other types of sanctions can be just as effective as deterrents as fines or jail sentences. Some of these sanctions include the stigma of being arrested, disruption of personal relationships (attachment), damage to past accomplishments or future opportunities (commitment costs), personal shame, and embarrassment. As described by Grasmick et al. (1993), shame is a self-imposed sanction that occurs when someone violates their own internalized norms of behavior and is manifested in feelings of guilt or remorse. Similarly, embarrassment is a social sanction that occurs when an individual commits behavior that others, whose opinion the violator values, find out about the behavior and do not approve. In fact, Grasmick and Bursik (1990) reported that the self-imposed sanction of shame acted as more of a deterrent to drunk driving and tax cheating than did legal sanctions.

Various authors have tested the effects of increasing 1 or more of the 3 elements of deterrence listed above in order to gain better compliance. Ross and Voas (1990) studied the effects of more severe punishment for drunk driving. They found no significant difference in drivers' alcohol levels in 2 cities even after a publicized campaign by a local judge in one of the cities to impose much harsher sentences for drunk driving. Ross and Voas advised that increasing the severity of the punishment alone did not necessarily increase deterrence. Rather, they suggested, policy makers should attempt to increase the certainty of being apprehended and punished instead of, or in addition to, an increase in the severity of the punishment. Sykes (1984) found evidence that increasing the certainty of apprehension as a result of a saturated enforcement initiative did reduce the incidence of alcohol-related traffic accidents. Grasmick and Bursik (1990) used the product of severity and certainty explaining that even if the punishment is severe, there is little or no deterrent effect if the probability of getting caught is zero.

There has been little research on the illicit behavior and attitudes of hunters, although some studies have been done regarding profiles of poachers, reasons for poaching, different tools for measuring wildlife violations, and recommendations for improving hunter compliance. Glover and Baskett (1989) found in Missouri that the highest percentage of deer poachers was in the 21- to 25-year-old age group. They also discovered that 42% had been drinking alcohol at the time of their arrest. The poachers in their study had an unemployment rate 30 times higher than that of legal hunters. Since many of the violators admitted to poaching just for fun, they may have been poaching simply to relieve boredom.

Glover and Baskett also speak of the possibility that wildlife violators belong to a subculture whose values and norms support poaching. In that subculture, poaching

is socially accepted, and in fact, poaching may enhance an individual's image within that group. Young people within this community recognize the attention given to poachers and attempt to emulate that behavior. Missouri wildlife officials are attempting to target schools in areas with high numbers of wildlife violations to educate young people about wildlife management and hunting ethics.

Hall et al. (1989) points out that society as a whole does not support the traditional justice system of punishment for wildlife violators as it does for other types of crime. The lack of support includes judges and prosecutors (Musgrave et al. 1993). Smith and Roberts (1976) reported that 66% of hunters said they did not think violations of hunting regulations were necessarily an indication of poor sportsmanship.

Researchers report various levels of compliance among hunters. Smith and Roberts (1976) found that 70% of waterfowl hunters admitted to party hunting (hunting until enough birds are taken to account for everyone's limit regardless of how many each individual hunter took), and 48% admitted to shooting before or after legal hunting hours. In another study, 39% of hunters reported that they had exceeded the bag limit (Hall et al. 1989). Upon interviewing waterfowl hunters after the season had closed, Jackson and Norton (1978) found that 46% of them admitted to intentionally violating waterfowl regulations.

Researchers have also investigated the influence different factors have in deterring hunters from committing violations. In a survey of duck hunters and state game wardens, Hall et al. (1989) asked participants to rank 23 factors according to their propensity for deterring violations. According to game wardens, the top methods for improving compliance were seizure and confiscation of equipment, hunting license revocation, and concentration of enforcement efforts on those violations having the greatest impact on the wildlife resource. Hunters in the same study ranked the credibility of the game warden, license revocation, and seizure and confiscation of equipment as the most influential factors affecting compliance.

Game wardens from different states ranked embarrassment 16th and 19th out of the 23 factors. Hunters in their respective states ranked embarrassment 13th, 17th, and 20th. In drunk driving studies, the self-imposed threat of shame was much more effective in deterring that activity than was the threat of embarrassment (Grasmick et al. 1993).

Jackson et al. (1979) also asked hunters to rank a number of factors and their influence on the hunters' tendency to violate wildlife laws. Hunters stated their lowest tendency to violate was when: 1) their children were present, 2) they were hunting on public lands, 3) they did not know the owner of the property. On the other hand 2 factors which might tempt hunters to violate were self-ownership of the land and low probability of getting caught. In this study, hunters said that game wardens' personalities and attitudes impacted the hunters' decision about violating. If the hunter respected the local game warden, he would not be as likely to violate hunting laws. Many of these hunters stated that fines were not a real deterrent, but they did fear the possibility of having their name published in the local newspaper as a violator. Hunters in Louisiana listed publication of their name in the newspaper as a violator

as the third most effective out of 23 factors considered for improving hunter compliance (Hall et al. 1989). This would indicate that embarrassment might in fact serve as a deterrent to wildlife violations.

## **Methods**

This research shows legal sanctions and non-legal sanctions and their effect on the likelihood of future wildlife violations. Legal sanctions examined in this research are community service, a \$200 fine, a 10-day jail sentence, forfeiture of hunting equipment, and revocation of a hunting license. Some research indicates that traditional legal sanctions have questionable value as a deterrent to criminal activity. Confinement has been found not to be a significant factor in deterrence (Jones et al. 1988). This may be due in part to the reluctance of judges to issue jail sentences (Robertson et al. 1973, Musgrave et al. 1993) and also because the probability of being apprehended, convicted, and sentenced to jail is quite low. Hall et al. (1989) reported that convicted wildlife violators admitted that fines have limited deterrent value.

While legal sanctions have a somewhat debatable effect as deterrents to violations of law, the non-legal sanctions of the threats of shame and embarrassment have been shown to be effective deterrents. Grasmick et al. (1993) showed that shame had twice the deterrent effect of legal sanctions regarding drunk driving. Berger and Snortum (1986) found in their survey that a "personal moral commitment" was a strong deterrent against drunk driving. In another study, shame was a stronger deterrent to tax cheating and drunk driving than were legal sanctions (Grasmick and Bursik 1990). In a study of an antilittering campaign, Grasmick et al. (1991) showed that an increase in the threat of shame and embarrassment was accompanied by a decrease in the proportion of respondents who said they would litter in the future.

This research compared the deterrent effects of legal sanctions with the threat of shame or embarrassment for wildlife violations. The effects of these sanctions as deterrents was measured by respondents' answers to a question about their own likelihood of committing a violation in the future. Likewise, respondents were asked about their chances of getting caught in a violation rather than the chances of some hypothetical person getting caught. Williams and Hawkins (1986) reported that self-reference measures have stronger effects than references to others. Also, Jensen et al. (1978) found that people are more influenced by the perception of their own chances of getting caught than by the chances of other people getting caught.

This research then compares respondents' feelings of how likely they think their chances are of being caught if they did commit a hunting violation and what effect that has on the likelihood that they will commit a future violation.

In addition this research gathered some descriptive statistics on how often hunters have been checked in the field by a game warden while hunting, how many days per year hunters are in the field, and how many years hunting experience they have.

## Survey

A telephone survey was conducted asking the same series of questions to 2 groups of randomly selected hunters who were categorized as either violators or non-violators. Violators had 2 or more convictions of a wildlife violation; non-violators were persons licensed to hunt in Oklahoma who had no record of any hunting violations in the state.

While non-violators had no record of wildlife convictions, it should not be inferred that they never committed a violation. Hunters listed as non-violators may have been cited but not convicted, may have wildlife convictions in other states, or may have committed wildlife violations, but were never cited in Oklahoma.

The violator group was drawn from a random sample of ODWC arrest files of individuals with 2 or more convictions from 1994 through 1996. Most of these individuals received more than 1 citation as a result of a single incident rather than being cited for 2 separate incidents. For example, 1 hunter may have received citations for headlighting deer, shooting from a public road, and hunting during the closed season, all stemming from the same incident.

For this research, violators must have been convicted, pled guilty, or forfeited bond in lieu of a trial on 2 or more wildlife violations. Hunters who had their cases dismissed by the court or who were found not guilty were not considered violators.

A telephone survey was conducted until 100 respondents from each group answered the survey. One hundred responses were recorded for each group of hunters. Of the 473 hunters who were phoned, 42.3% completed the survey, 25.8% had moved or had their telephone number disconnected, 18.0% were unable to be contacted before the completion of the survey, 11.4% were unable to be contacted within 5 attempts and were eliminated from the sample, and 2.5% declined to complete the survey.

Twelve percent of the violators said they had never received a citation for a hunting violation in Oklahoma even though their names were randomly drawn from ODWC arrest records and surveyors asked for respondents by name when telephoning.

Five members of the non-violator group were female while there were no females in the violator group. Since the number of females was so small, no separate tests were performed for gender.

The survey was preceded by an advance letter advising all the hunters in both groups that the ODWC was conducting a survey and would be contacting them by phone. The advance letter advised the hunters of the nature of the survey, assured hunters that their answers would be completely confidential and would not be identified with them personally.

## Measures

Similar to Grasmick et al. (1991), respondents' shame was measured by asking them to respond to the statement, "Generally, in most situations, I would feel guilty if I committed a hunting violation." Hunters were asked to respond on a 4-point Likert scale from strongly agree (coded 1) to strongly disagree (coded 4).

Embarrassment was measured in a similar manner. Respondents were given the statement, "Generally, most of the people whose opinion I value would lose respect for me if I committed a hunting violation." Hunters were asked to respond on the same 4-point scale.

Certainty of punishment is a factor in deterrence of criminal activity noted by many researchers (Grasmick et al. 1993, Zimring and Hawkins 1973, Sykes 1984, Homel 1988). As a subjective measure of certainty of punishment, hunters were asked to respond again on the 4-point scale of strongly agree to strongly disagree to the statement, "Generally, in most situations, if I committed a hunting violation, I think I would get caught."

Hunters were also asked about the impact of legal sanctions. Respondents were told to imagine they had committed a hunting violation and, as a result, had been sentenced to each of 5 different legal sanctions including revocation of hunting license, forfeiture of hunting equipment, 40 hours of community service, 10 days in jail, and a \$200 fine.

These 5 sanctions have been used with varying frequencies by the courts in Oklahoma. Fines for wildlife violations in Oklahoma typically range from \$10 to \$1,000 (plus \$90 court costs). Two hundred dollars as an amount for the fine was selected arbitrarily as a mid-range amount for a moderate hunting violation.

Jail sentences of up to 1 year in the county jail may be given upon conviction of some wildlife violations in Oklahoma. The 10-day jail sentence used in this study was again chosen arbitrarily as a typical sentence one might receive if jail time was warranted.

Forfeiture of equipment has also been used in conjunction with other legal sanctions on wildlife violations. Title 29 of the Oklahoma Statutes (1995) states that "any item, equipment, vehicle, or other property" which is used in violation of certain provisions of the wildlife laws is subject to seizure and forfeiture. Items such as firearms, ammunition, spotlights, vehicles, freezers, and boats have been forfeited to the state as a result of hunting convictions. In this study, "forfeiture of equipment" was not defined. It was left up to the respondent to interpret what that equipment might be. If a respondent asked what was meant by forfeiture of equipment, he was told "whatever equipment was used in the violation."

Likewise, "revocation of hunting license," was not defined as to a length of time. Hunting licenses have been revoked for a period of time from 1 to 5 years in Oklahoma. Again, the length of time was not mentioned and was left to the respondents' interpretation.

Community service has also been used as a form of punishment for wildlife violations as in other crimes. Forty hours was selected as an arbitrary number as a mid-range penalty. The survey did not specify what type of work was to be performed during this community service.

Hunters were asked how much of a problem each of these punitive measures would cause for them and asked to respond on a 4-point scale from "a big problem" (coded 1) to "no problem" (coded 4). There was a flaw with this part of the survey instrument. For legal sanctions, the highest level of response was "a big problem."

However some respondents who had already answered "a big problem" to 1 question wanted to emphasize the severity of another sanction by answering, "a huge problem" or "that's even worse." Therefore, there was no way to record the difference between a "big problem" and "a huge problem."

The dependent variable used, as a measure of future behavior, was the respondents' assessment of whether they would commit an offense in the future (Tittle 1977). Respondents were asked, "How likely is it in the future that you will commit a hunting violation?" Answers were recorded on a 4-point scale from very likely (coded 1) to very unlikely (coded 4). These categories were then collapsed so that those who responded "very unlikely" were coded low on likelihood of future violations, whereas those responding "very likely," "somewhat likely," or "somewhat unlikely" were coded as high.

## Results

Responses of violators and non-violators were compared regarding the likelihood of their committing future hunting violations (dependent variable) as a result of the independent variables of the threats of shame and embarrassment and the probability of getting caught in a violation.

Concordant ( $N_s$ ) and discordant pairs ( $N_D$ ) were examined and Gamma was calculated using the following equation:

$$\text{Gamma} = \frac{N_s - N_D}{N_s + N_D}$$

A one-tailed test for probability was used since the direction was predicted.

Violators who scored high on measures of shame said they would be less likely to commit a hunting violation in the future (Gamma = 0.697;  $P < 0.01$ ). Similarly, violators who scored high on the embarrassment scale also said they would less likely to commit a violation in the future (Gamma = 0.783;  $P < 0.001$ ). Also significant was the relationship for violators who felt a higher threat of getting caught if they committed a violation and a lower probability of committing a future violation (Gamma = 0.571;  $P < 0.01$ ).

There was also a relationship between the threats of shame and embarrassment with the likelihood of committing future violations by non-violators. Like violators, non-violators in this sample indicated that those who measured high on threats of shame and embarrassment were less likely to commit a future hunting violation ( $P < 0.01$ ). However, there was no similar correlation for non-violators between the probability of getting caught and the likelihood of a future violation.

The threat of legal sanctions, unlike the threat of shame and embarrassment, did not significantly affect the likelihood of future violations. In fact, for the sanctions of a \$200 fine, equipment forfeiture, and hunting license revocation, the relationship with the likelihood of a future violation was opposite of that expected (negative Gamma). If legal sanctions were an effective deterrent to hunting violations, one

would expect that those who scored high on the impact of legal sanctions (a big problem) would score low on the likelihood of future violation. However, there was no such significant relationship on any of the legal sanctions. Thus, it appears that shame and embarrassment are more of a deterrent to committing future violations than are legal sanctions.

The respondents' responses were averaged using 1 = no problem; 2 = a little problem; 3 = a moderate problem; and 4 = a big problem. Of the legal sanctions examined, hunters responded that a \$200 fine would cause the least problem ( $\bar{x}$  = 3.03), followed by 40 hours of community service ( $\bar{x}$  = 3.22), revocation of hunting license ( $\bar{x}$  = 3.64), forfeiture of hunting equipment ( $\bar{x}$  = 3.67, and a 10 day jail sentence causing the biggest problem ( $\bar{x}$  = 3.89).

## **Discussion**

While the criminal justice system, including wildlife enforcement, relies on legal sanctions to deter criminal activity, this research indicates that the threats of shame and embarrassment could be more of a deterrent than are legal sanctions. This is consistent with the findings of Grasmick et al. (1991) that an anti-littering campaign aimed at shame and embarrassment increased compliance with littering laws. Similarly, Grasmick and Bursik (1990) reported that the threat of shame was a stronger deterrent than legal sanctions for tax cheating and drunk driving.

As for legal sanctions, a monetary fine is the most commonly punitive measure handed down by courts in Oklahoma for wildlife violators. Interestingly, though, the respondents in this survey reported that a \$200 fine would cause the least problem for them of the 5 legal sanctions examined. Hunters said that a 10-day jail sentence would cause the biggest problem for them. Jail time, however, has rarely been given for wildlife violators in Oklahoma. With the crowding of jails and prisons and budget constraints of counties who administer local jails, wildlife violators are even less likely to receive that kind of punishment. Since jail time is rarely given for wildlife violations in Oklahoma, it may not serve as a serious deterrent due to the low certainty of punishment (per Sykes 1984, Ross et al. 1990).

Hall et al. (1989) found that hunters considered license revocation and forfeiture of hunting equipment to be important factors in improving compliance with hunting laws. Perhaps wildlife agencies should explore the increased use of these sanctions in addition to strategies for exploiting the feelings of shame and embarrassment of hunters considering wildlife violations. Public service announcements or other media campaigns similar to those used to combat drunk driving or littering could be developed to promote the responsible use of wildlife resources. Hunters in Louisiana ranked the publication of violators' names and offenses in the local newspaper as more of a factor influencing compliance than forfeiture of equipment, jail time, or a 1-year license revocation (Hall et al. 1989).

Violators in this survey who perceived a high certainty of getting caught in a violation reported that they would be less likely to commit a future violation. Since funding for most agencies is somewhat fixed and it is not practical to significantly

increase enforcement personnel, agencies should try to capitalize on the relationship of the certainty of getting caught and future violations by increasing the perception of getting caught. This might be accomplished by using high profile techniques such as hunter compliance checks on rural highways (Collins and Wharton 1984, Graff 1982), special emphasis projects in trouble areas, and increased publicity of successful cases.

Though 37.5% of the respondents in this survey "strongly agreed" that they would be caught if they committed a hunting violation, actual chances of getting caught seem quite low. The median number of days hunted per year in this survey was 21.5. This, multiplied by the median number of years hunted, which was 20, yielded 430 days hunted by each hunter. The mean number of times each hunter reported he was checked in the field was 2.56. This number divided by the total number of days the hunter was in the field (430) shows that each hunter has about a 0.56% chance of being checked in the field. In fact, 26% of the hunters surveyed said they had never been checked by a game warden while hunting. This is consistent with the findings reported by Beattie (1992), in which persons were hired in a violation-simulation study to measure the detection rate of poaching. The poacher (simulator) was detected 0.5% to 4% of the time.

While wildlife law enforcement does not receive the attention of other law enforcement issues such as drunk driving, natural resource agencies nationwide are charged with the responsibility for protecting and managing the wildlife resources in their respective states. An integral part of this management is the enforcement of laws and rules protecting wildlife. While some violators may be caught violating such laws and face various legal sanctions, countless other hunters will never be contacted by a wildlife officer. Therefore, agencies must rely on whatever naturally deters people from committing violations. Measures that capitalize on feelings of shame and embarrassment should be used as one tool in the wildlife law enforcement community in their efforts to protect the public's wildlife resources.

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