The Correlation between Hunting and Crime: A Comment

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One of the major goals of social science is to find relationships between various sets of behaviors; that is, to see what behaviors co-occur. The co-occurrence of behaviors may be evidence for a causal path and may ultimately lead to strategies for reducing undesirable behaviors and enhancing desirable ones. In the following article, three recent studies (Eskridge, 1985; Clifton 1994a, 1994b) that explore the question of the co-occurrence of hunting/trapping and various criminal behaviors are critiqued. The methods of these studies are examined because how they evaluated the relationship between hunting and crime influenced their results.

Clifton's method involved constructing ratios of the number of hunters to the number of crimes committed in counties for two states (New York and Ohio). His procedure for controlling the influence of population density (splitting the counties into those above the median for population density and those below) has no statistical rationale to support its use. Eskridge, although conducting appropriate statistical analyses, made conclusions that did not take into account the unique features of his data. These concerns are addressed in the critique to follow. Additionally, the present author reanalyzed Clifton's data by conducting correlational procedures that suitably controlled for the influence of population density as well as income on the relationship between hunting/trapping and crime. It was found that hunting/trapping did not co-occur (correlate) with various criminal acts when population density and income were controlled.

Clifton gathered data on the number of hunting license sales in each county in New York and the incidence rates of various crimes that occurred in each county during 1992. Descriptive statements about the ratios of hunters to pedophiles were made because "[r]atios are most meaningful in comparing large numbers to large numbers...and median figures may be more accurate than averages" because of the skewing influence of New York City, hunting, crime rate and population values (Clifton, 1994a, p. 7). A similar procedure was utilized to analyze data from counties in Ohio (Clifton, 1994b).
Comparisons of hunting license sales and crime rates were conducted after splitting counties based on population density (population density is known to influence both variables). Clifton concluded that there is a strong positive association between hunting and various crimes, especially pedophilia, other sex crimes and family violence. He offered the observations made upon the median split figures as evidence for a common personality characteristic between hunters/trappers and pedophiles, that of "dominionism" which is a "desire for mastery and control" (Clifton, 1994a, p. 7).

In another study (Eskridge, 1985), hunting license sales in all fifty states were correlated with reported rates of robbery, rape, murder, aggravated assault, and overall crime rate. These correlational analyses revealed a much different finding than that of Clifton. Eskridge found that hunting license sales tended to be inversely related to crime rates in almost every category and for almost every state. When population density was controlled in an analysis of covariance, the relationship became even more strongly negative. Eskridge tentatively concluded that "the overall hunting experience...may have some type of cathartic impact and calming influence upon hunters that makes them less inclined to resort to the use of violence" (1985, p. 9).

While all three studies attempted to answer the same question about the influence of hunting on criminal behavior, each derived opposing conclusions. The reasons for this may involve the methodological differences across the studies. Clifton (1994a) noted the influence of extreme high values contributed by the New York City boroughs in population and crime rates and the extreme low values of hunting licenses. As extreme values they skew the distributions of these variables, making a correlational analysis inappropriate. But rather than reduce the data to a comparison of proportions above and below a median split for population density (to control its influence), it is reasonable to eliminate the extreme values from the analysis. Extreme values can be considered "outliers" and not representative measures of the variable(s) of interest. Upon transforming the remaining data to normalize its distribution, Pearson Product Moment (PPM) correlation coefficients could then be calculated to capture the nature of the relationship (if any) between hunting and (violent) crime.

In the reanalysis of Clifton's data, the log function of the variables that show skewed distributions (after removing the outliers New York City boroughs and Nassau county) was used as data. They normalized (achieved skew values of less