

Variables to Accompany Ember et al. "Risk, Uncertainty, and Violence in Eastern Africa..." Human Nature 2013

The variables in the Excel spreadsheet (accompanying) are described below. In parentheses are the labels in the columns of the spreadsheet.

Culture ID (ID_Culture)

Culture Name (Culture_Name)

Focus

For most purposes the ratings are made with regard to the whole society (such as ratings of warfare frequency). However, if there is internal variation, such as how warriors treat noncombatants, or whether warriors take land, the situation of the focal group should be given priority.

Time

The date given here (the ethnographic present--EP) formed the basis for the time period rated in the study. A 25-year time period was from -15 prior to the EP to +10 years afterwards.

Pacification

In the HRAF Collection of Ethnography information on pacification was generally contained in OCM categories 177 and 636. For this study, only societies rated 1 or 2 were used: 1) Not pacified for all or part of the 25-year time period as reported by ethnographer; 2) Inferred to be unpacified because warfare frequency is greater than or equal to 3 by individual coder. For the remainder of the scale see C. R. Ember and M. Ember (1992b).

State Organization (StateShort)

Most of the societies in this sample are included in the Ethnographic Atlas and the level of political hierarchy is listed in column 32b. We consider a society to be a state if the level of hierarchy is 3 or more levels above the community. Cases with pacification of 3 and up should be counted as missing.

1= present

0=absent

Frequency of Warfare:

For ratings of warfare frequency in societies represented in the HRAF Collection of Ethnography, the coders were asked to read the full-text information in categories 578, 628, 648, 721, 723, and 726 of the Outline of Cultural Materials (OCM), the HRAF subject-indexing system.

Definitions:

Warfare. Following the C. R. Ember and M. Ember (1992a: 248) study, warfare is defined as: “socially organized armed combat between members of different territorial units (communities or aggregates of communities).” Note that the scale and organization of warfare generally differs considerably from warfare in modern nation-states, although the mortality rates are probably considerably higher proportionally. Any socially organized armed combat engaged in between communities or larger units was considered warfare regardless of the stated intent (e.g., revenge). By this definition, we focus on armed combat of socially organized groups, not on motives for fighting. Accordingly, some feuding will be considered warfare, if the episode is between communities or larger units and if there is at least one socially organized group on at least one side.

Internal and External Warfare. We follow C. R. Ember and M. Ember (1992b: 173), in distinguishing internal from external warfare as follows: “internal warfare is defined as socially organized armed combat between territorial units (communities or larger aggregates) within the same society...External warfare refers to war between the focal society and other societies.”

Warfare Frequency Summary Scores

Note: each coder rated on the following 5-point scale for each of the five frequency measures of warfare and then if a code from 1-5 was given, the two scores were summed. The five scales were: overall warfare frequency (**OvFreqSum**); internal warfare frequency (**IntFreqSum**), external warfare frequency (**ExtFreqSum**), external attacking frequency (**ExtAttackSum**), and external attacked frequency (**ExtAttackedSum**).

All frequency ratings were based on the following five-point ordinal scale used by each of the two coders:

- 1) Warfare seems to be absent or rare (coders were instructed not to code warfare as absent simply because there is no information unless the ethnographer explicitly states that there is little or no warfare, or unless the ethnographer describes intercommunity and intra- and inter-societal contacts but does not mention hostilities.);
- 2) Warfare seems to occur once every three to ten years;
- 3) Warfare seems to occur at least once every two years;
- 4) Warfare seems to occur every year, but usually only during a particular season;
- 5) Warfare seems to occur almost constantly and at any time of the year.

Resource Problems

USE OCMs: 132, 146, 261-2, 312, 433, 731, 735

Threat of Famine (Famine): The information in this section should refer to the frequency of episodes of famine (time of starvation when many deaths occur because of food shortage or if it is reported that a substantial segment of the society has to move because of food shortage). Consider famine to be present if the ethnographer uses the word, but if possible record any information that relates to the severity of the food shortages. (Do not consider chronic hunger as famine; that possible category of resource scarcity is considered below.)

- 1) low – food is reported to be ample or adequate with no report of famine, or famine only occurred in the past (not in this time period), or occasional periods of food shortage are reported but the scarce foods are reported to be replaced by other available foods, or there may be chronic hunger in the absence of the conditions below.
- 2) moderate – there is no reported famine during this time period, but the ethnographer states that there is an ever-present threat of famine.
- 3) moderately high – one famine occurred during the 25-year time period.
- 4) high – more than one famine occurred during the 25-year time period.
- 8) don't know
- 9) confusing or contradictory

Threat of Natural Disasters (Disasters): We want to have a rating here of the incidence of severe weather problems (droughts, floods, storms, killing frosts, etc.) or pest problems (e.g., locust infestations) that may destroy food resources. If any of these problems are coincidental with famines that are rated above, make sure you note the cause of the coincidence. If ethnographers say so, record exactly when (what years) these events occurred and note the seriousness of the effects on resources or people (e.g., what proportion of the crop was destroyed, how many people or what proportion of the population were affected).

- 1) low – food is reported to be ample or adequate with no indication that there have been severe natural disruptions of food supplies. Mark a “1” also if such serious disruptions only occurred in the past or future (not in this time period). If there were some disruptions of food supplies, but they did not seem to be serious because there was plenty of other food available or made available, consider the coding to be a “1”.
- 2) moderate – there is no reported serious natural disruption of food during this time period, but the ethnographer states that there is an ever-present threat of such disruptions.
- 3) moderately high – one serious natural disruption of food occurred during the 25-year time period.
- 4) high – more than one serious natural disruption occurred during the 25-year time period.
- 8) don't know
- 9) confusing or contradictory

Overall frequency of hunger (ChronicSc)

Note: Ethnographers sometimes describe hunter-gatherers as living precariously with not enough food because they don't have food stored. Be careful to distinguish between people who always seem to get food, even though it appears uncertain to an outsider, and people who end up hungry.

- 1) low or rare – do not go by the absence of information on hunger. Code this only if food is reported to be adequate or abundant for the population, with no report of any of the problems outlined immediately below. You may code the society as having no chronic resource problems if the ethnographer does not specifically say that food is abundant, as long as the ethnographer spends a great deal of time describing available food and does not mention any problems.
- 2) there are some “hungry times” during the year when the people complain that they do not have enough food or enough of a particular food. Make sure to note in the space below what the specific complaint is, and how often it occurs.
- 3) some members of the population usually do not have enough to eat.
- 4) most members of the population usually do not have enough to eat – i.e., they are chronically undernourished.
- 8) don't know
- 9) confusing or contradictory

For analysis, Chronic Scarcity was regrouped and recoded if necessary into two additional variables:

Chronic Seasonal
Chronic Poor

Chronic Scarcity Seasonal (**ChronicSeasonalRevised**)

- 1) either no or rare chronic hunger (1 on CHRONIC) OR chronic scarcity is in the form of all-year round hunger for some or all (3, or 4) on CHRONIC.
- 2) Seasonal hunger is highest type of chronic scarcity (2 or 2.5 on CHRONIC)

Chronic Scarcity Poor (**ChronicNonSeasonal**)

- 1) Either no or rare chronic hunger (1 on CHRONIC) OR chronic scarcity is in the form of some or all of the population usually do not have enough to eat (3 or 4 on CHRONIC)
- 2) Some or all of the population usually do not have enough to eat (3 or 4 on CHRONIC)

Outcomes of Warfare in Terms of Resource Acquisition

Note to Coders: The point of reference here is what the society you are rating does. DO NOT CODE WHAT OTHER SOCIETIES DO when they fight with the society you are rating.

Note on Data File: a prefix of “R” as in “R_Int” stands for Resolved rating, internal warfare and R_Ext stands for Resolved rating, external warfare.

Taking of land resources (O1):

- 1) the defeated are never driven from their territory
- 2) the defeated are sometimes driven from their territory, but the victorious rarely use the land of the defeated
- 3) the defeated are sometimes driven from their territory and the victorious sometimes use the land of the defeated
- 4) the defeated are usually driven from their territory and the victorious sometimes use the land of the defeated
- 5) the defeated are usually driven from *their* territory and the victorious usually use the land of the defeated
- 7) not applicable because warfare does not occur during time period
- 8) don't know
- 9) confusing or contradictory

Taking of non-land/non-people resources (O2):

- 1) non-land resources and non-people resources (e.g., animals, food, tools, transport) are never taken from the defeated
- 2) non-land resources and non-people resources are sometimes taken from the defeated
- 3) non-land resources and non-people resources are usually taken from the defeated
- 4) non-land resources and non-people resources are always taken from the defeated
- 7) not applicable because warfare does not occur during time period
- 8) don't know
- 9) confusing or contradictory

Taking of people (O3):

- 1) people are never taken from the defeated
- 2) people are sometimes taken from the defeated
- 3) people are usually taken from the defeated
- 4) people are always taken from the defeated
- 7) not applicable because warfare does not occur during time period
- 8) don't know
- 9) confusing or contradictory

Behavior Toward Noncombatants and Combatants During Warfare

Note: The point of reference here is what the society you are rating does when engaged in armed combat. DO NOT CODE WHAT OTHER SOCIETIES DO when they fight with the society you are rating.

[In the data file, a prefix of R_Int stands for Resolved rating, internal warfare and R_Ext stands for Resolved rating, external warfare.]

Killing or Attempting to Kill Non-Combatants (BNC-1):

- 1) Non-combatants are never or rarely attacked with the intent to kill

- 2) Non-combatants are sometimes attacked with the intent to kill
- 3) Non-combatants are usually attacked with the intent to kill
- 4) Non-combatants are always attacked with the intent to kill
- 7) not applicable because warfare does not occur during time period
- 8) don't know
- 9) confusing or contradictory

Rape of Women Associated with Armed Combat (BNC-2)

- 1) Women are rarely or never raped
- 2) Women are sometimes raped
- 3) Women are usually raped
- 4) Women are always raped
- 7) not applicable because warfare does not occur during time period
- 8) don't know
- 9) confusing or contradictory

Torture or Mutilation of Non-Combatants and/or Combatants (BNCC-3):

Try to separate killing itself (rated in BNC-1) from deliberate attempts to promote or prolong physical and/or psychological pain and suffering [Note: original coding scheme tried to separate treatment of non-combatants and combatants, but scale was combined because coders could not usually tell.]

- 1) Torture or mutilation is rarely or never practiced
- 2) Torture or mutilation is sometimes practiced
- 3) Torture or mutilation is usually practiced
- 4) Torture or mutilation is always practiced
- 7) not applicable because warfare does not occur during time period
- 8) don't know
- 9) confusing or contradictory

Destruction of Civilian Resources (e.g., crops destroyed, houses burnt)—(BNC-4).

- 1) Civilian resources are rarely or never destroyed
- 2) Civilian resources sometimes destroyed
- 3) Civilian resources usually destroyed
- 4) Civilian resources always destroyed
- 7) not applicable because warfare does not occur during time period
- 8) don't know
- 9) confusing or contradictory

Non-Physical Intimidation of Civilians (BNC-5).

- 1) Intimidation of civilians is rare.
- 2) Intimidation of civilians occurs sometimes.
- 3) Intimidation of civilians is usual.

- 4) Intimidation of civilians always occurs.
- 7) not applicable because warfare does not occur during time period
- 8) don't know
- 9) confusing or contradictory

Killing of Combatants (BC-1)

- 1) low – not too many enemy combatants are killed in battle
 - Attacks are aimed at one or a few particular individuals
 - A few individuals are killed out of a large group
- 2) moderate – a considerable number of enemies are killed in the course of particular battles
- 3) high—try to kill most of the enemy combatants in battle
- 7) not applicable because warfare does not occur during time period
- 8) don't know
- 9) confusing or contradictory

Neighbors to be Omitted for Special Analysis (Omit_Neigh)

A “1” in this column indicates that the case is omitted for the purpose of eliminating neighboring societies.