

Measures of Skew
Chapters 3 and 5
Making the News: Politics, the Media and Agenda Setting
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Calculating Inverse Normalized Shannon's H Entropy: Inverse Normalized Shannon's H Entropy is calculated by taking the sum, across all topics (or other units), of the product of the proportion of attention accounted for by each topic multiplied by the natural log of that proportion, normalized to account for the total number of possible topics (N), then subtracted from 1. Values can range from 0 to 1.

$$\text{InverseNormEntropy} = 1 - \frac{\sum_{i=1}^n p(x_{it}) * \ln p(x_{it})}{\ln (N)}$$

where:

x_i represents an issue

$p(x_i)$ is the proportion of total attention the issue receives

$\ln(x_i)$ is the natural log of the proportion of attention the dimension receives

N is the total number of issues

Calculating Normalized Herfindahl-Hirschman Index: The Normalized Herfindahl Index is calculated by taking the sum, across all topics (or other units), of the square of the proportion of attention accounted for by each topic, normalized to account for the total number of possible topics. Values can range from 0 to 1.

$$\text{NormHerfindahl} = \frac{\sum_{i=1}^n (p(x_i))^2 - \frac{1}{N}}{1 - \frac{1}{N}}$$

where:

x_i represents a topic

$p(x_i)$ is the proportion of total attention the topic receives

N is the number of topic