On Certain Indices for Ordinal Data with Unequally Weighted Classes

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Abstract. In this paper, some new indices for ordinal data are introduced. These indices have been developed so as to measure the degree of concentration on the "small" or the "large" values of a variable whose level of measurement is ordinal. Their advantage in relation to other approaches is that they ascribe unequal weights to each class of values. Although, they constitute a useful tool in various fields of applications, the focus here is on their use in sample surveys and specifically in situations where one is interested in taking into account the "distance" of the responses from the "neutral" category in a given question. The properties of these indices are examined and methods for constructing confidence intervals for their actual values are discussed. The performance of these methods is evaluated through an extensive simulation study.