ABSTRACT

Violence against women and children is a form of human rights violation that has a serious impact on individual and community life. This phenomenon continues to be a concern because it not only threatens the physical and mental health of victims, but also hinders social and economic development. Central Java Province is one of the provinces with the highest number of cases of violence against women and children in Indonesia. The difference in the number of cases in each district/city in Central Java indicates that there is a certain pattern in the number of cases in a district/city, so to understand and address this issue, an analysis of the pattern and distribution of violence is needed, so that patterns and trends can be identified more clearly. The grouping of districts/cities with high levels of violence using K-Harmonic Means is expected to provide useful information for the government and related institutions in formulating more effective prevention policies. Based on the results of the analysis using R-Studio software, it was found that the K-Harmonic Means clustering with 3 clusters and $p = 3$ was the most optimal cluster as seen from its lowest Davies Bouldin Index value compared to other clusters. The results of the most optimal cluster showed that there was 1 city classified as having a high level of violence, 10 districts/cities classified as medium, and 24 districts/cities classified as having a lower level of violence.

Keywords: Violence, Cluster Analysis, K-Harmonic Means, Davies Bouldin Index