The Effect of Graph Design Type on Word Preferences In the Description of Trend and Cyclic Events

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Abstract: This study was conducted as a part of larger study on the effect of graph type on trend and cyclic event comprehension. It aims to present the analysis of subjects' word preferences in the verbal description of trend and cyclic events, given different graph types (linear, round). For this purpose, a novel round graph type was designed. For instance, while in the linear graph timeline for a year, January is located on the left and December on the right side, in the round graph, January and December are located adjacently. As a data collection tool, verbal description task and evaluation forms were used. 40 university students participated in this study.

The results revealed that, although the graph type has no significant effect, the event type conveyed by them modulates word preferences (ex. usage of trend, discrete, and conceptual words) in the description of relations among elements depicted in the graph.