THE COMPLEX INTERACTION BETWEEN VALENCE AND AROUSAL AND ITS EFFECT ON INFORMATION DIFFUSION

Mohammad Salehan, College of Business Administration, Cal Poly Pomona, 3801 W Temple Ave, Pomona, CA 91768, 909-869-3249, msalehan@cppe.edu
Giang Nguyen, College of Business Administration, Cal Poly Pomona, 3801 W Temple Ave, Pomona, CA 91768, gcnguyen@cpp.edu

ABSTRACT

Previous research shows that sentiment of text influences its diffusion in social media. Each emotion can be located on a three-dimensional space formed by dimensions of valence (positive–negative), arousal (passive / calm–active / excited), and tension (tense–relaxed). While previous research has investigated the effect of different dimensions of emotion on information diffusion in social media, the interaction between valence and arousal and its effect on information diffusion remains unexplored. We propose a research model and test it using data collected from Twitter.

Keywords: sentiment mining, information diffusion, social media