

**Abstract:**

The current study is conducted to propose approaches for improving Kansei Engineering's data collection phase. Conventionally Kansei engineering is based on self-report, especially the Likert rating scale, which is biased. In this study, we are proposing two implicit methods based on cognitive science methodologies. **Methodology:** Two designed experiments: 1-cognitive 2-neural. In the cognitive experiment, IAT is modified for Kansei Engineering material. In another experiment, Kansei engineering stimuli are presented in a way that is proper for ERP and its focus was on the N400 component. **Results:** the results of the cognitive experiment conformed to previous experiments' results. The neural experiment results show the frontal poles are affected by emotional/semantic stimulus and N400 can not be a tolerable indicator for emotional arousal and valence. **Conclusion:** The results of the cognitive experiment suggest the abnormal distribution in self-report rating scale system is not a system error, but it's an innate human bias.

**Keywords: Kansei Engineering, Emotion, Implicit Association Test, N400**



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