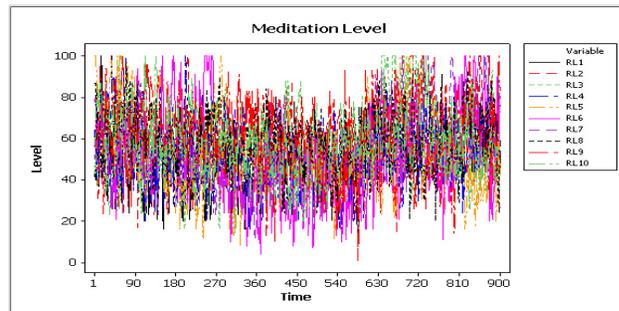








noticeable change in the meditation levels in the three places. The one-way repeated measure ANOVA test is used to observe the differences in meditation levels among the three places. However, we have also employed ANOVA test to determine which place differs the most from the others.



**Figure 1.** Meditation levels of 10 subjects at different places

By comparing each place with the others, we noticed that the supermarket and garden are having the highest significant difference among the other places with  $\sigma = .001 (<.05)$ . People felt more relaxed in the café and garden and our results showed that there was no significant differences between those places ( $\sigma = .855 >.05$ ). These results strongly suggest that people feel relaxed in response to place stimuli. In soothing third places people can restore their attention and lessen stress levels. In the future, we are planning to integrate our results into a location-based mobile system, and evaluate the ability of our system to classify and categorize places in real time. In doing so, we will be able to influence brainwaves by guiding people to relaxing environments.

Places	Mean	Std. Deviation	N
Café	56.9777	5.86631	10
Supermarket	48.7153	6.60941	10
Garden	60.5617	5.93503	10

**Table 1.** Meditation level means and standard deviations

### Conclusion

Our preliminary experiments and results showed a noticeable pattern in EEG signals in relation to different places. These differences allow us to understand how people perceive urban environments and hence, build a recommendation map of third places that relaxes them and remedies the directed attention fatigue caused by their stressful lifestyle.

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