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# THREE EMPIRICAL STUDIES OF MEDITATIVE EFFECT OF KHAVARANI'S PAINTINGS: AN APPLICATION IN HEALTHCARE

#### Abstract:

With three alternative statistical methodologies, we investigate the aesthetic effects of "Abstract Romanticism," a genre of painting created by Khavarani. We report our findings in two published manuscripts (IJSS, 2106) and in one forthcoming (IJSS, September 2017). Our findings are highly robust to three alternative models and their statistical estimations. We confirm that Khavarani's painting style, combines artistic elements that impart positive effect on viewers' psyche. Most interestingly, we find that their effects last during our experimentation. In the first paper, the data encompass survey of 318 viewers' responses. We use several parametric models appropriate for the Likert scale data and consider 32 iterations of the models. All statistic results are significant at 95% confidence level, confirming our research question. In the second study, we take advantage of our large dataset that shows normal distribution on histograms, and use non-parametric estimators. We show that our results are independent of viewer's gender, age bracket and their base moods. We invoke Vartanian and Skov (2014) and observe that when our subjects viewed Khavarani's paintings, they "disengaged" from their external world. We recognize such experience as a "meditative joy." In the third research, we conduct a pattern analysis of the survey of 252 individuals who visited three art galleries, one of which was the experimental gallery (Khavarani Gallery). We consider the before and after moods viewers reported for each gallery they visited. Every subject visited three galleries, albeit in different orders. We evaluate patterns for combinations of Order, Gender and Age. Time plots for time series show that for the group of subjects visiting Khavarani's gallery first, almost every subject experienced an increase in their mood. Besides the pattern for Order, we consider the Pattern for Gender and Age, generating 64 combinations. Chi Squares ( $\chi^2$ ) for all regressions lead to accepting the null hypothesis for their independence, with high P values. Those visiting the experimental gallery first experience elevated mood while in that gallery. Their moods remain elevated even after leaving the Khavarani's gallery, until eventually decline after leaving that gallery. With our robust cross-validation of evidence, we are launching a pilot study of the effect of Khavarani's paintings on 100 patients of a medical clinic in US. We survey 100 patients to examine the effect of his paintings on their moods. With a Cost-Benefit Analysis, we will evaluate the economics of use of paintings in healthcare facilities.

### **Keywords:**

Statistical Modeling, Abstract Romanticism, Khavarani's Paintings, Paintings in Medical Facilities

JEL Classification: C00, C13, C40