This thesis examines the impact of Technical Analysis on Karachi Stock Exchange by investigating the tools used for Technical Analysis for the sample period of 1997 to 2014. The KSE-100 index was examined to represent the market over the sample period for the following three aspects. First the results indicate that KSE-100 index do not follow random walk model by applying the Wright's rank and sign variance ratio test. Secondly the study compared a variety of extremely popular technical trading rules based on simple moving averages, exponential moving averages, relative strength index and stochastic RSI to find the predictive ability of these indicators. The thesis also employed generalized regression neural network (GRNN) for stock prediction. The results show that these trading rules have predictive power over future price behavior. It is also evidenced that the inclusion of oscillators like RSI and RSI Stochastic increase the performance in generating above average return. The combination of GRNN with simple moving averages also produced significant return. Based on these trading rules, the study proposed two trading strategy in order to know that whether investor beat buy-and-hold strategy. The results indicate that strategy based on these rules have the ability to outperform the buy-and-hold strategy. The results are significant even after considering the transactional cost. Technical Analysis is very effective for the investors in creating excess return for the sample period.

Keywords: Market Efficiency, Karachi Stock Exchange, Moving Averages, Relative Strength Index, Stochastic Oscillators, Artificial Neural Network, Technical Analysis