of this model has an approximate 40% linear correlation in prediction of the mean of total grade.

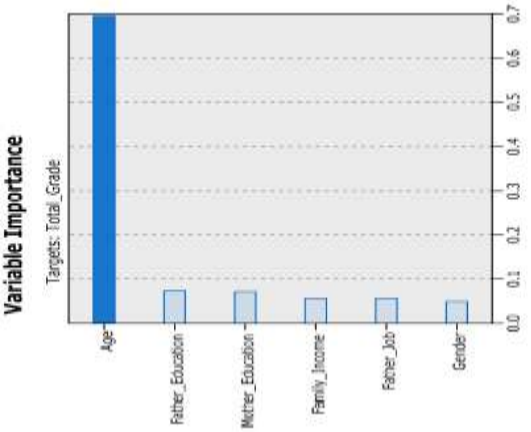

Figure 9. The neural networks results for prediction

6. Conclusions

It can be concluded that, in most cases, the mean of total grades for male applicants fell further behind the total grades of their female peers according to the following variables: parental education, parental job, and family's income. Additionally, female grades increased marginally at all higher parental education levels and increased substantially for applicants with university-educated parents. Thus, the data mining methods and regression models show that all of the family background factors influence on participates' educational achievement. Some factors have positive effects on the mean of total grades such as: parental education, parental job and family's income. Additionally, the age of applicants has a negative effect on the candidates' educational achievement. Neural Net analysis indicated an additional point of view in this study. Due to this analysis the important factors on educational achievement are age, father's education, family's income, mother's education, father's job, and gender respectively.

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