



Annotated Summary of:

Lussier, Robert N. (1995), "A Nonfinancial Business Success versus Failure Prediction Model for Young Firms." *Journal of Small Business Management* 33(1): 8–20.

Chapter 5: Multiple Discriminant Analysis and Logistic Regression *Multivariate Data Analysis*, Sixth edition

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This article employs logistic regression analysis to test a model to predict the success or failure of a young business by examining managerial factors rather than using financial ratios. The author seeks to ascertain whether successful and failed businesses start with equal resources. The dependent variable is dichotomized as either success (the business is maintaining at least industry-average profits) or failure (the business is involved in court proceedings or voluntary actions resulting in losses to creditors) of young firms (up to 10 years old). From past research, the author identifies 15 major variables contributing to success or failure. A sample of 216 respondents (108 failed and 108 successful) is used to estimate the parameters of the regression model employing the one step using the maximum-likelihood method.

The results indicate an overall significant model (chi-square,.01) with 4 of the 15 variables significant at the .05 level. The model performs better at predicting firm failure than firm success, but in either case, it performs better than would be expected from random guessing. The model accurately predicts the success or failure of a particular firm approximately 70 percent of the time. Overall, the research holds that successful and failed businesses do not have equivalent starting resources. Firms that succeed developed more specific business plans and sought more professional advice, whereas those that failed had more education and less difficulty attracting and retaining quality employees. The model may be implemented by entrepreneurs, investors, creditors, consultants, and others as a means of assessing the probability for a business's success or failure.