

Econometric Model for Academic / Career Success

I teach a course on Applied Econometrics called Statistical Modelling for Business Analytics.

This is quite a popular course in our department and many of my students have told me that they enjoy it and learn a lot about data analysis and regression methods and the philosophy of econometrics.

This year, I suggested the following econometric model for academic or career success (some variables added on the suggestion of my students). I thought I will upload this here for general mulling 😊

For non-econometricians, the β 's in the following equation are the weights of each of the factors in determining success. I also specified a model for self-confidence which is determined by prior success etc.

$$\begin{aligned} \text{Success} = & \beta_0 + \beta_1 * \text{Ability} + \beta_2 * \text{Hard Work} + \beta_3 * \text{SelfConfidence} + \beta_4 * \text{Resilience} + \beta_5 * \text{Emotional intelligence} \\ & + \beta_6 * \text{Conscientiousness} + \beta_7 * \text{Resourcefulness} + \beta_8 * \text{Physical health} + \beta_9 * \text{Mental health} \\ & + \beta_{10} * \text{Parental Support} + \beta_{11} * \text{Socioeconomic status} + \beta_{12} * \text{Minority status} + \beta_{13} \\ & * \text{Time management skills} + \beta_{14} * \text{Networking skills} + \beta_{15} * \text{Support of mentors (bosses)} + \beta_{15} \\ & * \text{Economic conditions and technology of that era} + u(\text{random error} - \text{luck}) \end{aligned}$$

SelfConfidence_t

$$\begin{aligned} &= \gamma_0 + \gamma_1 * \text{Success}_{t-1} + \gamma_2 * \text{Knowledge of Own Ability} + \gamma_3 * \text{Experience of Working Hard}_{t-1} \\ &+ \gamma_4 * \text{Physical health} + \gamma_5 * \text{Mental health} + \gamma_6 * \text{Emotional intelligence} + \gamma_7 * \text{Socioeconomic status} \\ &+ \gamma_8 * \text{Wisdom (not comparing with others, having a sense of proportion)} + \gamma_9 * \text{Parental Support} + \gamma_{10} \\ &* \text{Appreciation or acceptance from peers} + \gamma_{11} * \text{Challenges faced (going out of comfort zone)}_{t-1} \\ &+ u(\text{random error} - \text{mood}) \end{aligned}$$