

## 1. File: Individual Turnover (spss)

### Predicting individual turnover

Steps:

- Analyze, Regression, Binary Logistic
- Dependent: Leaver Status
- Remaining variables in Covariates
- Click Categorical, put Country as Categorical Covariates, Reference Category, First or Last, Change, Continue
- Continue, OK, Output is ready to view.

Interpretation:

- Omnibus tests of model coefficients: how good our model is at accounting for turnover across our organization.
- Model summary:
  - R-square: an indication of the degree of variation in our dependent variable that is accounted for by the variation in our predictor variables.
  - Nagelkerke R-square: also referred to as the pseudo R-square in that it gives an estimated indication of the percentage variation that we account for in the dependent variable in the proposed model.
- Variables in the equation: how individual factors account for the dependent variable in the model.
- Odd ratios:
  - In OLS multiple linear regression the coefficients predict the change in the DV for one unit change in the IV. In logistic regression the probability of occurring an event is estimated. Since, the DV is binary in logistic regression; it makes sense to predict the probability (p). Odds ratios are the ratio of the odds of the event occurring to the event not occurring. In the current turnover case, the odds ratio is the likelihood or odds of  $Y=1$  if the value of  $X$  is increased by one unit.
  - For example, in this case if the odds ratio for tenure was 2.00, we could say that odds of an individual being a leaver compared to being a stayer doubles for every additional year of service. This means the employee is twice as likely to be a leaver as a stayer for every one year he stays with the organization.
  - A categorical variable like Country will be considered as Dummy Variable and reference category needs to be set. For example, an odds ratio for the reference category country (say Z) of 0.497 implies that after controlling for all other factors, if an individual was based in the USA, they are nearly half as likely to be a leaver than if they were based in country Z.
  - $\text{Exp}(B)$  indicates the odds ratio for each IV.

**2. File:** Turnover team DATA (spss)

**Predicting team turnover**

**3. File:** Turnover team DATA (spss)

**Analyzing turnover costs for turnover factors**

**4. File:** Customer satisfaction only N2507 (spss)

**Predict customer loyalty and reinvestment through sales executive performance in a financial services organization**

- Customer survey for sales executive competency: (1 = very dissatisfied, 5 = very satisfied)
  1. The sales person understands your needs (Sat1)
  2. The sales person seems confident (Sat2)
  3. The sales person has a recommendation (Sat3)
  4. The sales person is knowledgeable (Sat4)
  
- Customer loyalty (1 to 5 point scale)
  5. Likelihood of reinvesting
    - a. 1 = definitely not
    - b. 2 = thinking about not to
    - c. 3 = not sure about
    - d. 4 = here again
    - e. 5 = definitely yes
  
  6. How much they may or may not reinvest (Invest more)
    - a. 1 = definitely not more than now here
    - b. 2 = unlikely to invest more than now here
    - c. 3 = planning to invest more (less than 50 percent)
    - d. 4 = planning to invest 50-100 percent more
    - e. 5 = double or more
  
  7. Gender of the sales person (1 = female, 2 = male)
    - Which of the sales person competencies are the most important?
    - Which aspects should the organization invest in to maximize customer loyalty?
    - Which role does the gender play?

## **Predict customer reinvestment through sales executive attributes and demographics in a financial services organization**

- Customer survey for sales executive competency: (1 = very dissatisfied, 5 = very satisfied)
  1. The sales person understands your needs (Sat1)
  2. The sales person seems confident (Sat2)
  3. The sales person has a recommendation (Sat3)
  4. The sales person is knowledgeable (Sat4)
  
- How much they may or may not reinvest (Invest more)
  - 1 = definitely not more than now here
  - 2 = unlikely to invest more than now here
  - 3 = planning to invest more (less than 50 percent)
  - 4 = planning to invest 50-100 percent more
  - 5 = double or more
  
- Gender of the sales person (1 = female, 2 = male)