**LinkedIn Usage Based on Employee's Seniority Level**

For this project I am analyzing the first pages of 20 LinkedIn users. I have used stratified and random sampling to select my data (LinkedIn profiles). For this research I used LinkedIn profiles of four CEOs, four current students at a university, four recent graduates, four junior and four senior level employees. I wanted to test the following hypotheses:

**Null hypothesis:** There is a difference in LinkedIn pages of individuals of different occupational levels. This means that there is an observed trend on the LinkedIn pages of CEOs, students, graduates, junior, senior level employees.

**Alternative hypothesis:** There is no difference between how a senior level employee markets themselves on the LinkedIn about section compared to entry-level or associate.

***Frequency:*** I analyzed the most common words used (highest frequency) among CEOs, students, graduates, junior, and senior-level employees. I referred only to the frequency of words that were not their name, article, commas, and period. From the table we notice that CEO, juniors, and seniors write more on their position, current students and graduates write more on their education (university).

|  |  |
| --- | --- |
| **Occupational Level** | **Most frequent words** |
| CEO | Provider, pool, Project44, Founder, Business, Chief, Microsoft, CEO |
| Current Student | UMD, Intern, Marymount, University, Student, Virginia, George Mason, Information |
| Junior level | Yelp, Sales, Data, Software, Social, Sector, Business, Junior |
| Recent Graduate | Marymount, University, Booz, Hamilton, Pharma, Catalent, Data, New York |
| Senior level | Senior, Consulting, Deloitte, Manager, Software, Engineer, Senior, Booz Hamilton |

***Named Recognition and Parts of Speech:*** CEOs have more number of NNP-NN (nouns), JJ (adjective), VBP, VBG

Current students have NNP, NN, and NNS the most (more nouns).

Junior levels have NN, NNP, and some JJ and VBG.

Recent Graduates have NNP and NN the most.

Senior levels have NN, NNP and some VBG, and VB.

The conclusion drawn from named recognition is that current students and recent graduates predominantly use nouns (school name, their name, etc.) in their profile, whereas CEOs, junior and senior levels use nouns, verbs and adjectives. Their usage of verbs signifies that they are “doers,” i.e. they like to get things done.

***Sentiment Analysis:*** The average sentiment of CEOs is 0.1565, current students is 0.1266, junior level is 0.1480, recent graduates is 0.1226, and senior level is 0.2165.

From sentiment analysis, we realize that every occupational level has almost neutral sentiment with their LinkedIn profiles. The senior levels are the most positive whereas the current students and recent graduates are least positive.

**CONCLUSION:** There is a pattern of similarity between recent graduates and currents students against CEOs, Seniors, and Juniors. Hence, we see a trend that makes the LinkedIn profiles different. Hence, we have evidence to reject null hypothesis. Hence, I think alternate hypothesis is true for my research.