

Analyzing the success factors of the Israel Employment Service placement program



Research

Department of Industrial Engineering and Management

Israeli Employment Service Background

- ☐ The service provides job placements and brokerage for jobseekers.
- ☐ Almost 60,000 jobseekers covering 71 bureaus all around Israel.
- ☐ The IES provides professional training, finding employees for employers and more.
- ☐ Israel with 3.8% unemployment rate (before the Covid-19 pandemic).

Project Goals

- Analyzing success factors of the Israeli Employment Service "Employment Circuits" placement program
- Write research paper and publish in Economic-Letters journal.
- Present the article in the Economy & Business, 19th International Scientific Events Conference, 20-23 August 2020, Burgas, Bulgaria.

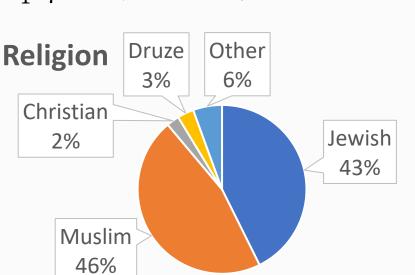
Literature Survey

- ☐ Higher local unemployment weakens the work norm (Winkelmann, 2014).
- ☐ Making debts more manageable for unemployed on social assistance led to a significantly better chance to get back to work (Sol & Kok, 2014)
- * The literature survey based on 29 references.

Analysis

Q1. Is there a difference between good placements of the **Arabic population to other populations?**

 H_0 : $\mu = 0$ (No difference between Arabs to other populations) H_1 : $\mu \neq 0$ (Otherwise)

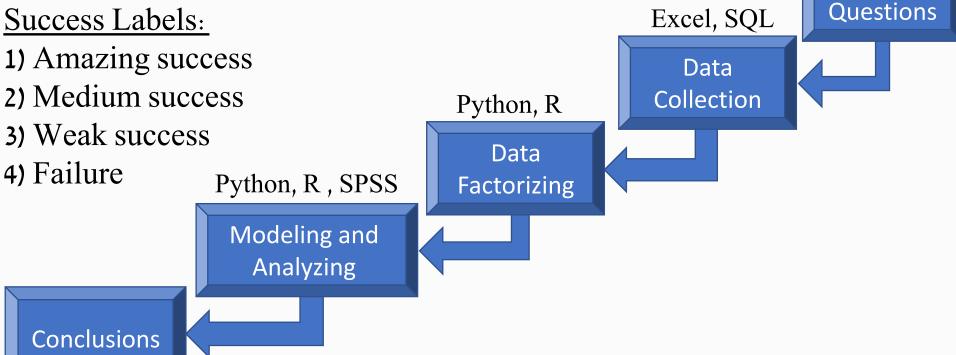


 ρ = 0.097, therefore, the conclusion is to not reject the null hypothesis and conclude there is no significant difference between the job placement of the Arabs and the job placement of the non-Arabs.



 $\rho \sim 0$

labels.



Method

Q2: How long job seekers are in the program before their placements?

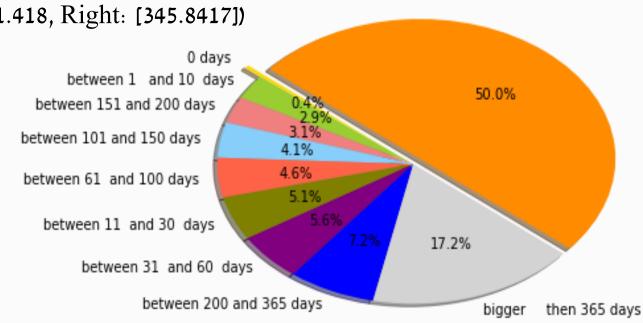
Almost half (49.99%) of program participants do not have a "placement date",

and more than 25% have "first entry date" greater than "last placement date".

After clearing the records of the negative diff, the data were summarized.

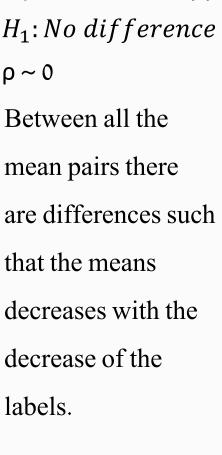
Confidence interval (in days) for job seekers in the program is:

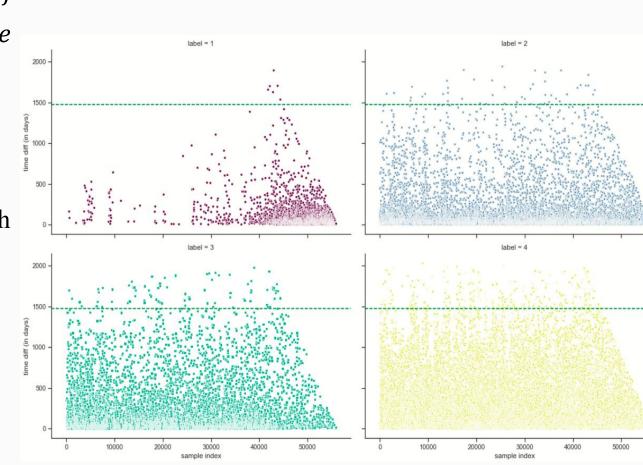
(Left: [336.994], Mean: 341.418, Right: [345.8417])



Q3: Is there a difference between the time length of jobseeker in the program to type of placement?

 H_0 : There is a difference

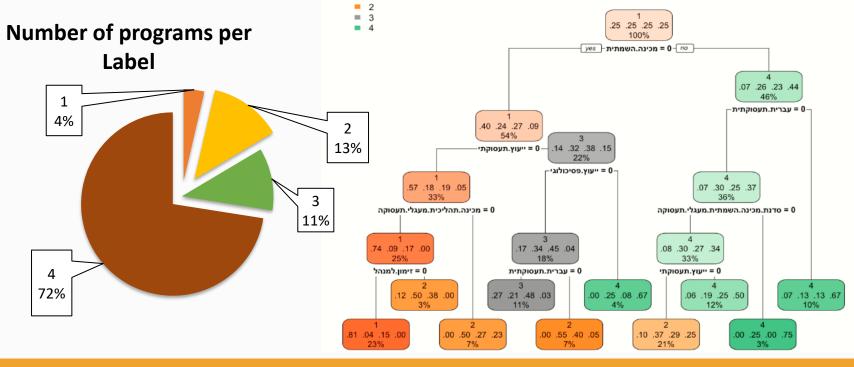




Q4: Do the number of activities from the program effects job seeker's placements?

There is a difference in the number of activities between the different types of successes (label), except for groups 2 and 3.

Decision tree model take a sample of jobseekers from the data frame and match their socioeconomic characteristics and activities to the data frame.



Q5: Is there an effect between socio-economic jobseeker characteristics to placement?

Multivariate regression model result (McFadden estimate) is 0.2368. Excellent fit in this model between 0.2 - 0.4 (McFadden,1977).

All model results are compared to label 4 (failure) and each model result was displayed is significant (ρ < 0.05):

- 1) There are more Arab cities compered to Jewish cities in labels 1 and 2. Muslim and Jew religions significantly more to be in label 1.
- 2) The Soviet Union and France countries significantly more to be in label 3 than label 1 (compered by p-value). Ethiopia significantly more to be in label 2.
- 3) Education has a strong effect on the success label. Academic degree or 'Teudat Bagrut' has significantly more to be in label 1, and non-education significantly more to be in label 3.
- 4) Disability affects human life including program success. From 20%-59% significantly more to be in label 2 and 60%-100% to be in label 3, but no disability at all significantly more to be in label 2 and not 1 as we expected.

Conclusions & Recommendations

- * There is no difference between the placement of the Arabs and the placement of the non-Arabs.
 - Consider continuing investigate if there is evidence to justify opening special programs to the Arab community.
- ❖ The number of job seekers placed through the program is 50% which indicates a low rate of placements.
- Investigate another reasons for the program poor job placement.
- ❖ Longer the jobseeker being in the program, the quality of his placement (label) decreased.
- Explore more on job seekers tools provide from the program activities and evaluate their effects.
- ❖ There is an influence between socioeconomic characteristics of requiring work on the type of success in the program.
- Making a deep statistical analysis on how job seekers influence by socioeconomic characteristics.