

Campus Placement at Ogilvy

Decision Scenario :-

Moon pharma came for college recruitment in Ogilvy Business School. There is a viral video claiming that male students and students with previous work experience are more likely to get selected. We have to validate this claim.

Hypothesis :-

H_{a1} : Male candidate are more likely to get selected in comparison to female.

H_{a2} : Students with previous work experience are more likely to get selected.

H_{o1} : Male candidate not have any preference of being selected over female.

H_{o2} : Students with previous work experience do not have any preference of getting selected.

Data Description :-

There are 100 datapoints collected about students from Ogilvy Business School. This data includes information of students such a their name, gender, previous work experience (in months) and their selection status.

As per the policy, students with only at least 12 or more months of work experience is considered to have any work experience and they are referred as "Yes" in work experience otherwise their work experience is "No".

Description Analysis:-

Frequencies of Selected (Yes/No)

| Levels | Counts | % of Total | Cumulative % |
|--------|--------|------------|--------------|
| No | 53 | 53.0 % | 53.0 % |
| Yes | 47 | 47.0 % | 100.0 % |

Frequencies of students getting selected

Frequencies of Selected (Yes/No)

| Selected (Yes/No) | Gender | |
|-------------------|--------|----|
| | F | M |
| No | 20 | 33 |
| Yes | 16 | 31 |

Dependency of gender and selection rate

Frequencies of Selected (Yes/No)

| Selected (Yes/No) | Previous Work Experience_encoded | |
|-------------------|----------------------------------|----|
| | Yes | No |
| No | 11 | 42 |
| Yes | 19 | 28 |

Candidates selected in Moon pharma split by previous work experience

Graph representation of data:-

Candidates selected in Moon pharma split by previous work experience (Bar Graph)

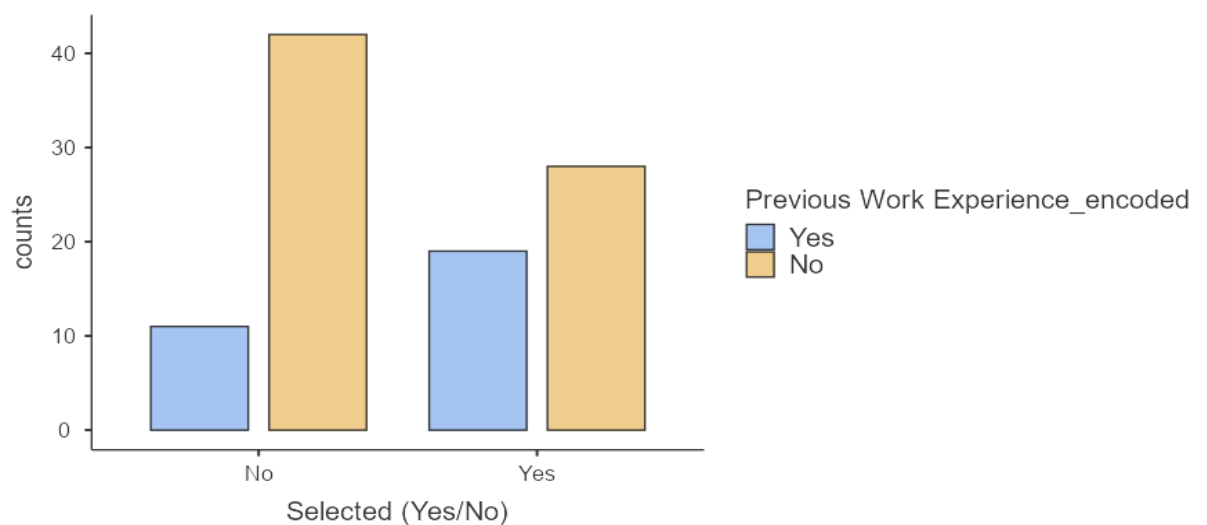


Fig 1. Candidates selected in Moon pharma split by previous work experience

Candidates selected in Moon pharma split by Gender (Bar Graph)

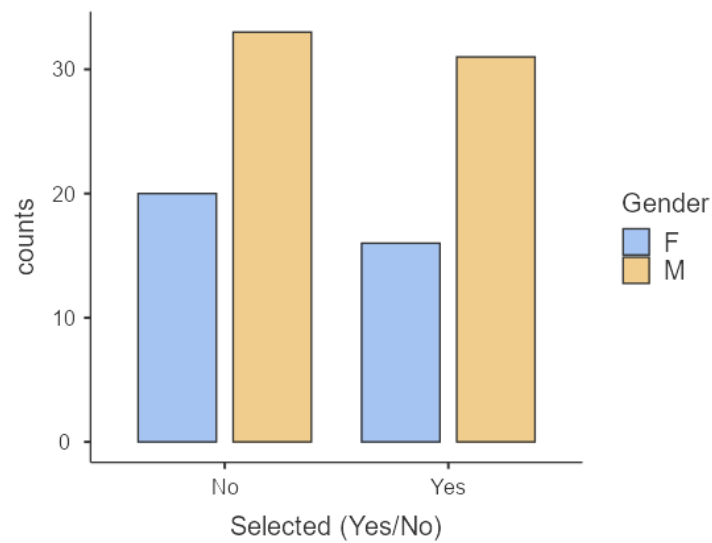


Fig 2. Candidates selected in Moon pharma split by Gender

Contingency Tables

Contingency table for selection frequency and gender

| Gender | Selected (Yes/No) | | Total |
|--------|-------------------|-----|-------|
| | No | Yes | |
| F | 20 | 16 | 36 |
| M | 33 | 31 | 64 |
| Total | 53 | 47 | 100 |

χ^2 Tests

| | Value | df | P |
|----------|-------|----|-------|
| χ^2 | 0.147 | 1 | 0.701 |
| N | 100 | | |

Result 1

Considering alpha value as 0.05 and p-value=0.701

Here p-value > alpha, accept null hypothesis

Accept H_{01}

Contingency table for selection frequency and previous work experience

| Previous Work Experience_encoded | Selected (Yes/No) | | Total |
|----------------------------------|-------------------|-----|-------|
| | No | Yes | |
| Yes | 11 | 19 | 30 |
| No | 42 | 28 | 70 |
| Total | 53 | 47 | 100 |

χ^2 Tests

| | Value | df | P |
|----------|-------|----|-------|
| χ^2 | 4.59 | 1 | 0.032 |
| N | 100 | | |

Result 2

Considering alpha value as 0.05 and p-value=0.032

Here p-value < alpha, reject null hypothesis

Reject H_{02}

Inference :-

Inference 1 : There is no evidence to show relation of student being male and getting selected in Moon pharma.

Inference 2 : There is evidences to show relation of student having previous work experience and getting selected in Moon pharma.

Recommendation :-

From our analysis we found evidence claiming that students having previous work experience are more likely to get selected in Moon Pharma in comparison to others. Thus it is recommended for students to have previous work experience to improve their chances of getting selected in Moon Pharma.