# A Study on Gender \& Educational association with the perception of crowd funding as a viable option to raise preseed capital. 

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#### Abstract

The role of Crowd funding is become significant after the Start up revolution and has the potential to solve this problem to raise capital at pre-seed stage for Startups. In the last three years the startup fever has gripped this country and have the potential to catapult it into the planned path for economic supremacy. In this backdrop of startup revolution, pre-seed capital is become one of the most talked about topic. Raising capital is not easy for Startups in nascent stage. Though different modes of raising capital like angel investors, venture capitalists, bank loans are available in the market still these options are not effective enough always to raise pre-seed capital. However Crowd Funding, which is already a well known option to raise pre-seed in developed country, has the potential to bridge this gap. This paper has tried to identify the Gender \& Educational association with the perception of crowd funding as a viable option to raise pre-seed capital.


Key Words: IT Startups, Crowd funding, Pre-seed Capital, Equity based crowd funding.

## INTRODUCTION

Raising capital has become a key problem for all kind of startups in today's world. Many entrepreneurs are facing challenges and landing in failure while raising the capital for their projects. External support is not always easily available while starting a new venture. The traditional modes of raising funds have their own limitations. For example while issuing loan, banks generally ask for collateral of the organizations which results in failure in many cases as the start-ups are not able to fulfil the requirement of getting loan. Another problem of raising capital is lack of historical data that includes asymmetric information for investors. One famous mode of finance is to identify venture capitalist where they also prefer to invest relatively large amounts and only if the project has potential and significant return propositions. Adding on to this, venture capitalists are generally not interested in pre-seed capital and prefer to fund on later stage companies because of the safe return on investment and a more precise valuation process (EY, 2012). All these issues have made the crowd funding as one of the most popular tool to raise fund. Even Governments has recognized the importance of this mode and the potential of crowd to raise capital for startups (Collins, 2012). Compared to the traditional mode of raising capital, crowd funding is recognized as one of most important and talked about alternative avenue for raising capital in pre-seed stage.

## OBJECTIVES:

1. This study helps to understand in detail the various funding options available to start -ups in general.
2. To explore the relationship between Gender \& the perception of various options to raise pre seed capital.
3. To explore the relationship between Educational Qualification \& the perception of various options to raise pre seed capital

## HYPOTHESIS TESTING

## Hypothesis 1:

H0: There is no difference in the score between the two genders in terms of their perception of the feasibility of the different options of raising pre seed capital.
H1: There is a significant difference in the score between the two genders in terms of their perception of the feasibility of the different options of raising pre seed capital.

## Hypothesis 2:

H0: There is no difference in the score between the different levels of highest education received in terms of their perception of crowd funding as a feasible option of raising pre seed capital.
H1: There is a significant difference in the score between different levels of highest education received in terms of their perception of crowd funding as a feasible option of raising pre seed capital.

## METHODOLOGY

This paper revolves around the responses circulated through a questionnaire. The number of samples collected is 500 . The questionnaire has questions both in terms of continuous variables and categorical variables including 5 point Likert Scale.

## DATA ANALYSIS

## Coding for the variable Gender

## Male --- 1

Female --- 2
The different hypotheses to be tested to support the above hypothesis are as follows:
Hypothesis (i):
H0: There is no difference in the score between the two genders in terms of their perception of crowd funding as a feasible option of raising pre seed capital.
H1: There is a significant difference in the score between the two genders in terms of their perception of crowd funding as a feasible option of raising pre seed capital.
Dependent Variable: Score (Continuous Variable)
Independent Variable: Gender (Categorical Variable) with two categories namely Male \& Female.
Technique Incorporated: T Test

## T-Test

Group Statistics

|  | 2 _Gender | N | Mean | Std. Deviation | Std. Error Mean |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $14 \_3$ | 1 | 350 | 19.14 | .991 | .053 |
|  | 2 | 150 | 19.33 | .946 | .077 |

## Independent Samples Test

|  | Levene's Testr for <br> Equality of <br> Variances  |  | t-test for Equality of Means |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | F | Sig. | t | df | Sig. <br> (2tailed) | Mean <br> Difference | Std. Error Difference | 95\% Confidence Interval of the Difference |  |
|  |  |  |  |  |  |  |  | Lower | Upper |
| Equal variances assumed | 19.723 | . 000 | 1.996 | 498 | . 046 | -. 190 | . 095 | -. 378 | -. 003 |
| Equal variances not assumed |  |  | 2.034 | 294.372 | . 043 | -. 190 | . 094 | -. 375 | -. 006 |

The p value of 0.000 less than 0.05 (the standard $5 \%$ significance level or $95 \%$ confidence interval) propels us to zero in on the unequal variance assumption of the T Test. The p value of 0.043 of the unequal variance T test being less than 0.05 propels us to zero in on the alternate hypothesis that there is a significant difference in the score between the two genders in terms of their perception of crowd funding as a feasible option of raising pre seed capital. The female gave significantly more score in this dimension compared to their male counterparts.

## B. Highest Education level \& the perception of various options to raise pre seed capital <br> Hypothesis to be tested:

## Hypothesis 2:

H0: There is no difference in the score between the different levels of highest education received in terms of their perception of crowd funding as a feasible option of raising pre seed capital.
H1: There is a significant difference in the score between different levels of highest education received in terms of their perception of crowd funding as a feasible option of raising pre seed capital.

## Coding for the variable Highest Educational Level

Less than or up to Higher Secondary --- 1
Up to Graduation--- 2
Up to Post Graduates / Masters ----3
Up to Doctorate/ PhDs ----4
The different hypotheses to be tested to support the above hypothesis are as follows:
Hypothesis (ii):
H0: There is no difference in the score between the different levels of highest education received in terms of their perception of bank loans as a feasible option of raising pre seed capital.
H1: There is a significant difference in the score between the different levels of highest education received in terms of their perception of bank loans as a feasible option of raising pre seed capital
Dependent Variable: Score (Continuous Variable)
Independent Variable: Highest Educational Level (Categorical Variable) with four categories.
Technique Incorporated: ANOVA

## One-way ANOVA

## Descriptives

| $14 \_1$ | N | Mean | Std. Deviation | Std. Error | 95\% Confidence Interval for <br> Mean |  | Minimum | Maximum |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  | Lower Bound | Upper Bound |  |  |
| 2 | 150 | 15.00 | .000 | .000 | 15.00 | 15.00 | 15 | 15 |
| 3 | 300 | 13.50 | .765 | .044 | 13.41 | 13.59 | 13 | 15 |
| 4 | 50 | 14.00 | .000 | .000 | 14.00 | 14.00 | 14 | 14 |
| Total | 500 | 14.00 | .895 | .040 | 13.92 | 14.08 | 13 | 15 |

## ANOVA

14_1

|  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Between Groups | 225.000 | 2 | 112.500 | 319.500 | .000 |
| Within Groups | 175.000 | 497 | .352 |  |  |
| Total | 400.000 | 499 |  |  |  |

The p value of 0.000 less than 0.05 (the benchmarked $95 \%$ confidence level or $5 \%$ significance level) propels us to zero in on the alternate hypothesis that there is a significant difference in the score between the different levels of highest education received in terms of their perception of bank loans as a feasible option of raising pre seed capital. The post hoc test helps us to zero in on where the difference lies.

The Post Hoc Tests incorporated are as follows:

- Tukey Pairwise tests \&
- Dunnett's control test.


## Post Hoc Tests

## Multiple Comparisons

Dependent Variable: 14_1

|  | (I) (J) <br> 3_Education 3_Education |  | Mean Difference (I-J) | Std. <br> Error | Sig. | 95\% Confidence Interval |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Lower <br> Bound |  |  | Upper <br> Bound |
| Tukey HSD | 2 | 3 |  | $1.500^{*}$ | . 059 | . 000 | 1.36 | 1.64 |
|  |  | 4 | $1.000^{*}$ | . 097 | . 000 | . 77 | 1.23 |
|  | 3 | 2 | -1.500* | . 059 | . 000 | -1.64 | -1.36 |
|  |  | 4 | -. $500{ }^{*}$ | . 091 | . 000 | -. 71 | -. 29 |
|  | 4 | 2 | -1.000** | . 097 | . 000 | -1.23 | -. 77 |
|  |  | 3 | .500* | . 091 | . 000 | . 29 | . 71 |
| Dunnett <br> sided $^{\mathrm{b}}$ t $(2-2$ |  | 4 | $1.000^{*}$ | . 097 | . 000 | . 79 | 1.21 |
|  |  | 4 | -. $500{ }^{*}$ | . 091 | . 000 | -. 70 | -. 30 |

*. The mean difference is significant at the 0.05 level.
b. Dunnett t -tests treat one group as a control, and compare all other groups against it.

The output above showcases that all the p values from the pairwise comparison values are less than 0.05 , showcasing that there is a significant difference between the three education levels (Up to graduation, Up to Post graduates/ masters \& Up to doctorate/PhDs) as far as the scores in terms of their perception of bank loans as a feasible option of raising pre seed capital. The output below validates the findings with the highest score given by i) Up to doctorate/PhDs followed by ii) Up to Post graduates/ masters \& i) Up to graduation.

## Homogeneous Subsets

14_1

|  | 3_Education | N | Subset for alpha $=0.05$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | 1 | 2 | 3 |
| Tukey HSD |  |  |  |  |  |
|  | 3 | 300 | 13.50 |  |  |
|  | 4 | 50 |  | 14.00 |  |
|  | Sig. | 150 |  |  | 15.00 |
|  |  |  | 1.000 | 1.000 | 1.000 |


|  | 3 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Tukey B |  |  |  |  |  |
|  | 4 | 300 | 13.50 |  |  |
| 50 |  | 14.00 |  |  |  |

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size $=100.000$.
b. The group sizes are unequal. The harmonic mean of the group sizes is used.

The means plot showcases the output below

## Means Plots



## CONCLUSION

Crowd funding is become very significant, being the future option to raise pre-seed capital for the Start ups. This research paper has given detailed insight of the Gender \& Educational association with the perception of crowd funding as a viable option to raise pre-seed capital. this research, There is a significant difference in the score between the two genders in terms of their perception of the feasibility of the different options of raising pre seed capital. The detailed analysis has shown that there is a significant difference in the score between the two genders in terms of their perception of crowd funding as a feasible option of raising pre seed capital. The female gave significantly more score in this dimension compared to their male counterparts. The second hypothesis has indicated that there sa significant difference in the score among the different levels of highest education received in terms of their perception of crowd funding as a feasible option of raising pre seed capital. It has further indicated that there is a significant difference in the score between the different levels of highest education received in terms of their perception of crowd funding as a feasible option of raising pre seed capital. The significant difference lies between the level Up to Post graduates/ masters with the other two, namely the level Up to doctorate/PhDs \& Up to graduation. There is no statistical difference in score between the level Up to doctorate/PhDs \& Up to graduation. Thus the level Up to Post graduates/ masters has given significantly low score compared to Up to doctorate/PhDs \& Up to graduation in this dimension.

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