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# Evaluation for Acceptance in Affording Funds Depending on Age Category Using SPSS

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## ABSTRACT

This case study to examine and evaluate the acceptance for charity according to the age group and hypothesis realizing the generosity. This study is an empirical methods research based on the survey method and the information are gathered for the case study includes raw data. The raw data have been gathered through survey by online method and analyze the data with the help of SPSS software

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Keywords: Hypothesis, Raw data, SPSS software.

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## 1. INTRODUCTION

In this case study, we are using SPSS software to analyze a survey conducted for the assessment which decides the liberality and meanness of people in contributing funds depending on age groups with One-way ANOVA test with the help of data and views gained by online methods.

### Limitations of the study

- Study on acceptance of funds depending on age group.
- It is confined in Coimbatore city only.
- Sample size is limited to fifty only due to the limited time period.

### Statistical tools

The primary data collected through the interview schedule from the respondents were presented as the master tables and required sub tables were prepared by statistical tool called One-way ANOVA.

### ONE-WAY ANOVA:

ANOVA test is nothing but the test for Analysis of Variance. One-way ANOVA is one of the two types of ANOVA test. This ANOVA test utilizes only one manipulated variable, where we can figure out the analytically substantial differences between the averages of two or more specimens of unassociated

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groups with F - distribution.

**ONE-WAY ANOVA FORMULA TABLE**

Source of variation	Sum of Squares	Degrees of Freedom	Mean Squares (MS)	F-Ratio
Within	$SS_w = \sum_{j=1}^k \sum_{i=1}^l (X - \bar{X}_j)^2$	$df_w = k-1$	$MS_w = \frac{SS_w}{df_w}$	$F = \frac{MS_b}{MS_w}$
Between	$SS_b = \sum_{j=1}^k (\bar{X}_j - \bar{X})^2$	$df_b = n-k$	$MS_b = \frac{SS_b}{df_b}$	
Total	$SS_t = \sum_{j=1}^n (\bar{X}_j - \bar{X})^2$	$df_t = n-1$		

## 2. ANALYSIS AND INTERPRETATION

**Table no 1.1**

**AGE GROUP**

AGE GROUP	FREQUENCY	PERCENTAGE
18 to 30	42	84
30 to 45	4	8
45 to 60	4	8
Total	50	100

### INTERPRETATION:

The above table shows that 84% belong to the age group 18 to 30, 8% belongs to 30 to 45 and 8% belongs to 45 to 60. Therefore, age group 18 to 30 are the maximum in number.

**Table No 1.2**

**CLASSIFICATION OF DONORS**

DONATOR	FREQUENCY	PERCENTAGE
Students	40	80
Parents	5	10
Staff	5	10
Total	50	100

**INTERPRETATION:**

The above table shows that 80% of the donators are students, 10% are parents and 10% are staff. Therefore, the higher number of donators are students.

**Table No 1.3****CLASSIFICATION OF SCHEME THE FUND SHOULD GO INTO**

SCHEME	FREQUENCY	PERCENTAGE
Helping poor	25	50
Obtaining medical need	7	14
Helping poor, obtaining needs	13	26
Research and development	5	10
Total	50	100

**INTERPRETATION:**

The above table shows that 50 % have the tendency in helping poor, 14% wants the donation for obtaining medical needs, 26% wants for helping poor and obtaining medical needs and 10% wants for research and development.

**Table No 1.4****CLASSIFICATIONS OF PAYING METHODS**

PAYING METHODS	FREQUENCY	PERCENTAGE
Direct payment	20	40
Through banking	6	12
Through online	24	48
Total	50	100

**INTERPRETATION:**

The above table shows 40% preferred direct payments, 12% preferred paying through banking and 48% preferred through online. Therefore, the maximum of the donators preferred paying through online.

**Table No 1.5****AFFORDING FUNDS IN WILLINGNESS**

PAYING WILLINGLY	FREQUENCY	PERCENTAGE
YES	46	92
NO	4	8
TOTAL	50	100

**INTERPRETATION:**

The above table shows that 92% are affording in willingness and 8% are not.

**Table No 1.6****CLASSIFICATION IN PAYING ALONG WITH EDUCATIONAL INSTITUTION FEE**

PAYMENT ALONG WITH EDUCATIONAL INSTITUTION FEE	FREQUENCY	PERCENTAGE
Yes	27	54
No	23	46
Total	50	100

**INTERPRETATION:**

The above table shows 54% are paying along with their educational institution fee and rest 46% are not willing to pay along with institutional fee

**Table No 1.7.1****DONARS WHO WANTS TO AFFORDING FUND**

WISH TO PAY MORE	FREQUENCY	PERCENTAGE
Yes	30	60
No	20	40
Total	50	100

**Table No 1.7.2**

The amount they wish to pay more than 10 rupees	Frequency	Percentage
20 to 50	4	8
50 to 100	5	10
More than 100	21	42
Nil	20	40
Total	50	100

**INTERPRETATION:**

The above table no 17.1 shows 46% wish to pay more and 56% are not. Hence, the table no 1.7.2 shows that 42% can pay more than 100 rupees, 10% can pay from 50 to 100 rupees, 8% can pay from 20 to 50 rupees and 40 % are not ready to pay any amount.

**Table No 1.8****CLASSIFICATION OF THE ADVANTAGE IN CONTRIBUTION TO THE FUND**

ADVANTAGES	FREQUENCY	PERCENTAGE
Flexibility	1	2
Low cost	7	14
Satisfaction	1	2
Low cost, flexibility	1	2
Low cost, satisfaction	2	4
Low cost, transparency	2	4
Transparency, satisfaction	34	68
Low cost, transparency and satisfaction	2	4
Total	50	100

**INTERPRETATION:**

The about table shows that 68% of the donors find transparency and satisfaction as an advantage of this intend.

**ONE WAY ANOVA FOR ACCEPTANCE OF FUND AND FACTORS****NULL HYPOTHESIS:**

There is no significant variance in between acceptance for funds with age category and their factors.

**ALTERNATIVE HYPOTHESIS:**

There is a significant variance in between acceptance for funds with age category and their factors.

Source of variation	DF	Sum of Square	Mean Square	F Statistic	P-value
<b>Groups</b> (between groups)	7	1402.233897	200.319128	1.179177	0.352606
<b>Error</b> (within groups)	23	3907.250110	169.880440		
<b>Total</b>	30	5309.484007	176.982800		

**LEVEL OF SIGNIFICANCE:**

5% Level of significance

One Way ANOVA test, using F distribution df(7,23) (right tailed)

**1. H<sub>0</sub> hypothesis:**

Since p-value > α, H<sub>0</sub> is accepted.

The averages of all groups considered to be equal.

In other words, the difference between the averages of all groups is not big enough to be statistically significant.

**2. P-value:**

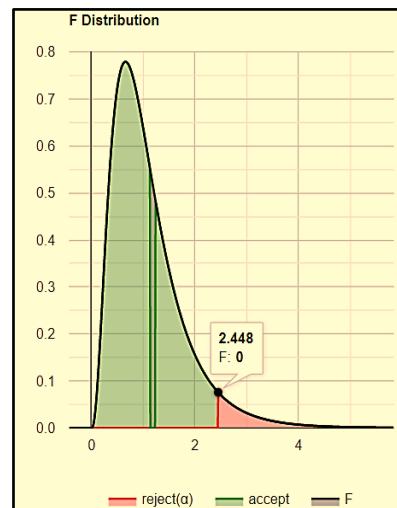
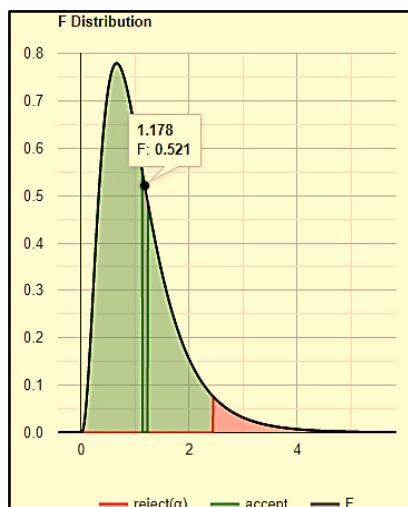
p-value equals 0.352606, [p (x ≤ F) = 0.647394]. This means that if we would not accept H<sub>0</sub>, the chance of type-1 error (rejecting a correct H<sub>0</sub>) would be too high: 0.3526 (35.26%)

The bigger the p-value the stronger it supports H<sub>0</sub>

**3. The test statistics:**

The above table shows that significant value = 0.3526. So 0.3522 > 0.05. Thus, the null hypothesis is accepted, and alternative is rejected. The test statistic F equals 1.179177, is in the 95% critical table value accepted range: [-∞: 2.4422]

Therefore, there is no significant variance in between acceptance for funds with age category and their factors.



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### 3. RESULT

Most of the donors are students under the age category 18 to 30. They find this 10 rupees as affordable and wanted this fund to help the poor. Most of them preferred payments through online due to this pandemic situation. They find difficult to look for fundraising charitable organization and so prefer in paying along with their educational institution fee. Since, this 10 rupees is not a very huge amount, everyone are ready to afford willingly and have complete satisfaction. Many can provide more than 100 rupees, which can make a huge amount and profitable if it is collected from entire Coimbatore city.

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### 4. CONCLUSION

In this paper, from the survey conducted in the educational institution, we have collected the opinion from students, faculties and parents in their willingness on donating funds to charitable organizations with which we have performed percentage analysis and One way ANOVA test using SPSS software and drawn the result of this experiment successfully.

### REFERENCES

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- [1] Nandhini.V, Ramya.M, &JeyaSowmiya. S. (2020). A STUDY OF CUSTOMERS SATISFACTION ON LAPTOP BRANDS IN PARTICULAR DISTRICT USING CHI-SQUARE TEST [Review of. A STUDY OF CUSTOMERS SATISFACTION ON LAPTOP BRANDS IN PARTICULAR DISTRICT USING CHI-SQUARE TEST]. The International Journal of Analytical and Experimental Modal Analysis, VOLUME XII(ISSUE-I),325–336. <https://doi.org/18.0002.IJAEMA.2020.VXIII1.200001.346709>
- [2] S.C.Gupta. (n.d.). Fundamental of mathematical statistics. V.K.Kapoor publisher, SultanChand& Sons.
- [3] Glen, S. (2020). ANOVA Test: Definition, Types, Examples. Statistics How To. <https://www.statisticshowto.com/probability-and-statistics/hypothesis-testing/anova/>
- [4] Statistical theory and practice by R.S.N.Pillai publisher S.Chand.
- [5] One-way ANOVA in SPSS Statistics - Step-by-step procedure including testing of assumptions. (2018). Laerd.com. <https://statistics.laerd.com/spss-tutorials/one-way-anova-using-spss-statistics.php>