



**Statistical Analysis and Interpretation of
Social Awareness Program among School Going Children
Implemented by COVA and its Impact (2022-23)**

Report:

COVA, an NGO has undertaken a Program for inculcating social values among school going children. It is observed that education system and also parenting is failing in preparing the students with respect to the sensitivity about prevalent social problems. The NGO is of the opinion that interventions through implementing social sensitisation programs can cultivate young minds to become sensitive human beings and transform them into socially responsible citizens.

In the beginning of the program the students were asked to list the social problems they were aware of. Most students could list 3 to 4 social problems and only some listed 7 or more. The Programme enabled students to identify more social problems. With progression of the programme, students added more problems in the list. And the list increased to identification of 36 problems that shows success of the programs in promoting awareness of students to more social issues.

A survey was conducted to study the effectiveness of conducting such Programs in three stages 1. Pre-Program 2. Mid-Program 2. Post-Program. In this survey students were ask to list 10 social problems as per there severity. On the basis of the data, statistical analysis has been done and the hypothesis of independence of social problems and Program stages are tested. The analysis is as given below. The chi-square test is applied. The R software has been used. The data of the first 10 social problems is used.

HYPOTHESIS:

H0: Social problems and program stages are independent.

Vs H1: Social problems and program stages are dependent.

R-CODING:

```
x=c(15,7,3,3,1,7,1,1,2,4,32,9,6,1,3,0,5,2,0,3,6,30);
```

```
length(x)
```

```
mx=matrix(x,nrow=10,ncol=2);mx
```

```
chisq.test(mx, correct=T)
```

OUTPUT:

```
> x=c(15,7,3,3,1,7,1,1,2,4,32,9,6,1,3,0,5,2,0,3,6,30);
```

```
> length(x)
```

```
[1] 22
```



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```
> mx=matrix(x,nrow=11,ncol=2);mx
```

```
      [,1] [,2]  
[1,] 15  9  
[2,]  7  6  
[3,]  3  1  
[4,]  3  3  
[5,]  1  0  
[6,]  7  5  
[7,]  1  2  
[8,]  1  0  
[9,]  2  3  
[10,]  4  6  
[11,] 32 30
```

```
> chisq.test(mx, correct=T)
```

Pearson's Chi-squared test

data: mx

X-squared = 5.0809, df = 10, p-value = 0.8857

The hypothesis is accepted.

Warning message:

In chisq.test(mx, correct = T) : Chi-squared approximation may be incorrect

```
> sum(x)
```

```
[1] 141
```

```
>
```

Limitations of Statistical Analysis:

The sample size is not constant for Pre Mid and Post Program. Some of the assumptions of chi-square test may not be satisfied.

Interpretation:

Because of the limitations of statistical testing and survey the chi-square test is unable to support the hypothesis that programs have any significant impact on the awareness of students regarding social problems.

But by looking at data it is observed that the priority of social problems selected by students has changed positively after the conduct of Program. For example, environment problems got 3rd rank before the Program while it got 1st rank in Mid-Program stage and also maintains the 1st rank in the Post-Program stage. Civic Amenities received rank 10 in Pre



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Program stage which converted to rank 2 in Mid Program stage and got rank 3 in Post-Program stage. Water problem was rank 8 in Pre Program stage which converted to rank 4 in Mid-Program stage while Post-Program rank is 5. Road problems ranked 11th in Pre Program which changed to Mid Program rank of 9 and became 7 in the Post Program stage.

The NGO has also conducted a survey regarding the individuals, groups and institutions that could help in solving the social problems. Institutions/schools/community/teachers got rank 1 in Pre-Program, Mid-Program and Post-Program with friends and family being second and third options for the students for solving social problems. We observed here that government officers got rank 6 in the Pre-Program and rank 5 in Mid-Program and Post-Program. This shows the impact of Program on students who became familiar that government officers can also help in addressing social problems. More or less the same is the case with the elected representatives so here it is observed that the scope of helping hands has increased because of the implementation of Program. It seems that the implementation of the program has effectively nurtured the students to identify the social problems as per their severity and to identify more helping hands in solving social problems.

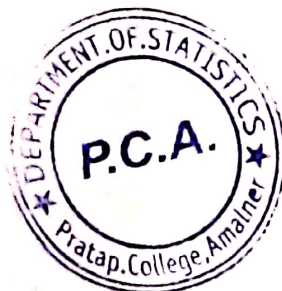
The output of Social Awareness Programme can be summarised as:

- Students were made capable of identifying social problems in society.
- The programme enhanced the understanding of social problems so that students could make the priority list of problems which need urgent attention.
- Students also became aware of the helping hands who can help them to address these problems.
- Students felt responsible and sensitive towards dealing with the problems.
- Programme is causal in shaping young minds as responsible citizens.

All in all the programme implementation for social awareness is fruitful.

Therefore, it is recommended that such programs be conducted on large scale for the benefit of society and nation.

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