

# SCIENCE OF HAPPINESS PROJECT REPORT

Group no. 6

*Impact of emotions on happiness*

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## INTRODUCTION

Happiness is a subjective experience - what brings elation to one person will not necessarily satisfy another - but from a psychological viewpoint, we must be able to quantify this state of mind in order to understand it.

When we discuss happiness, we are referring to a person's enjoyment or satisfaction, which may last just a few moments or extend over the period of a lifetime. Happiness does not have to be expressed in order to be enjoyed - it is an internalized experience, varying in degrees, from mild satisfaction to wild euphoria. Psychologists often refer to happiness as a **positive effect** - a mood or emotional state which is brought about by generally positive thoughts and feelings. Positive affect contrasts with low moods and negativity, a state of mind described as **negative affect** in which people take a pessimistic view of their achievements, life situation, and future prospects.

## PROJECT PURPOSE

The major objective of the project was to find out how people are affected by certain positive imagery. The influence of such bias on people's efficiency and mental health.

How two different bias has a different impact on people. How we can create a sense of positive thoughts in people through bias in thoughts.

## PROJECT OVERVIEW

Emotions and thoughts are highly interdependent, thus when we observe that subject is sad/ is having negative thoughts, we can easily influence the person with positive and happy thoughts to improve his/her situation. The basic idea of the project was to observe this change under certain biased conditions created by the surveyor or by certain external influences.

## SURVEY

### Part - 1

The survey was conducted among the students of IIT Kharagpur. We gathered a group of students randomly and divided them into two equal parts.

The first group of students was asked to enter their CG at the beginning of the survey and the second half of the students were asked to enter their CG at the end of the survey.

To the first group, the CG prompt was divided into four parts like this

**Your CG \***

Select Your CG here
< 6.0 (VERY LOW)
6.0 TO 7.0 (BELOW AVERAGE)
7.0 TO 9.0 (AVERAGE)
> 9.0 (HIGH)

After that, we asked some logical questions like

**There are 16 grapes on a tree. Tim took 12. How many grapes are left? \***

☐ 4

☐ 0

☐ Grape Tree?

☐ None of these

And to capture the present state of mind of the student at the beginning of the survey, we asked a few questions like

**Rate \***

	Not at all	Less	Moderate	High
How happy are you *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How worried are you *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

After that, to assess their emotions, anxiety, and happiness, we asked a few questions about capturing their state of mind.

**Part 2:**

The survey was conducted among the students of IIT Kharagpur. We gathered a group of students randomly and divided them into two equal parts. In the first part of the group, every time the respondent answered a question, he/she was shown a happy image like



And in the second part of the group, a sad or depressing image was shown after every response, like



The questions asked were mostly based on intellect and for every response we tried to measure their response time, their emotion and activeness to continue the survey.

## OBSERVATIONS

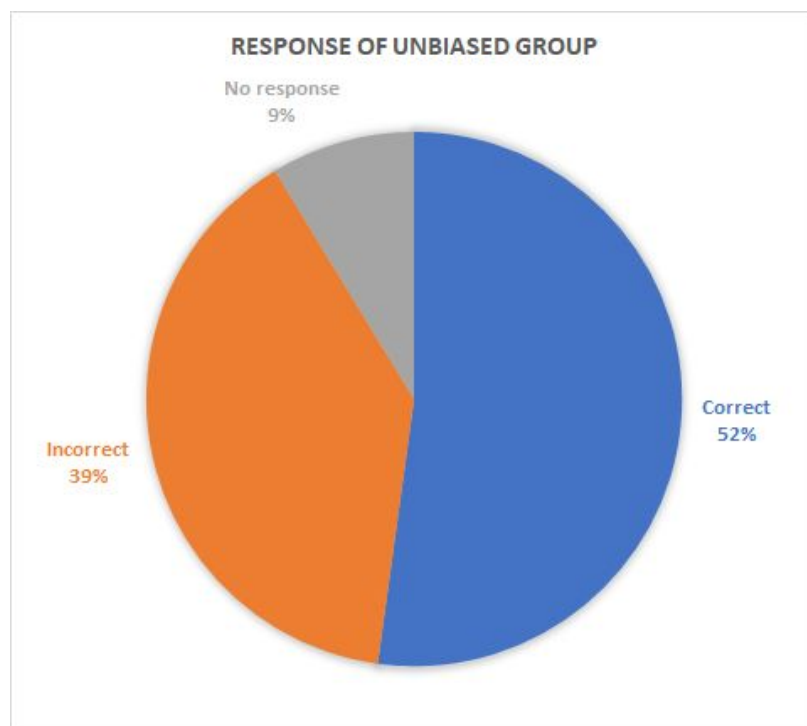
### Survey 1:

We expected that the biased group of people, the ones who were asked CG at start of experiment would have a more significant change in emotion, positive or negative, ie., when asked how happy they are at the start of the survey and once before end of it, the change in answer is expected to be more in biased case.

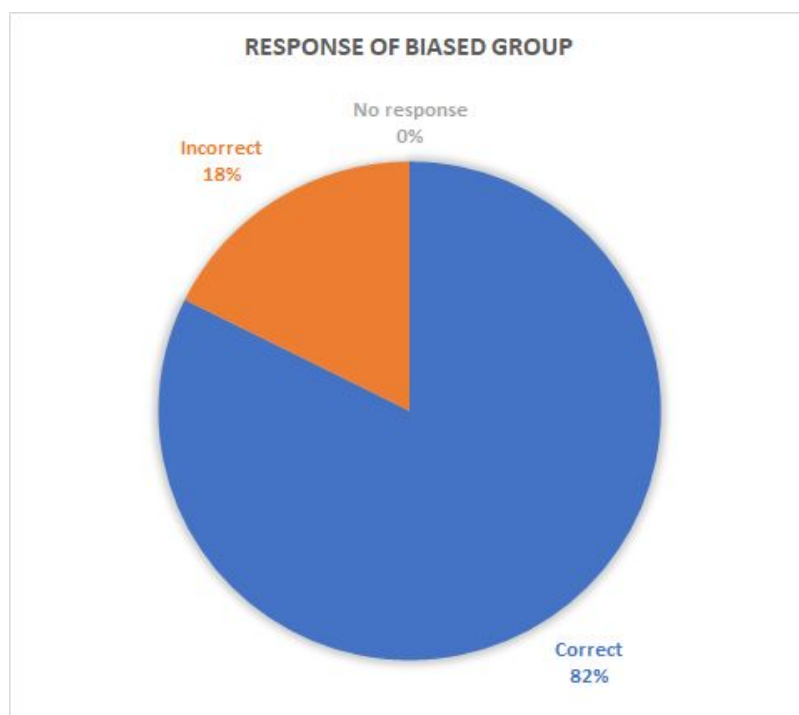
We observed that for the group of unbiased people, 90% of people had “Happy” as their response on completion of the survey, compared to 50% “Worried” and 20% “Unhappy” for respondents negatively biased, and, 60% of the positively biased found themselves “neutral” in terms of anxiety.

What was also observed was that the negative biased group had some things in common, most of them ‘skipped meals’ “most days”, ‘had trouble concentrating’ “most days”.

Another observation from the survey was that even though unbiased respondents had a higher happiness index they were inconsistent in the intellectual questions, they were more careless, “less worried”.



When compared to the biased group,





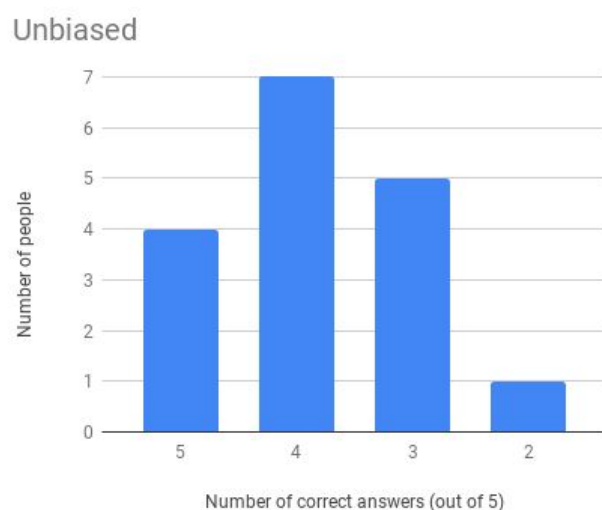
## Survey 2:

We expected that the positive bias group of people would have a much higher accuracy/expectation compared to unbiased, whereas people who are shown negative bias would have a much smaller accuracy/expectation ratio.

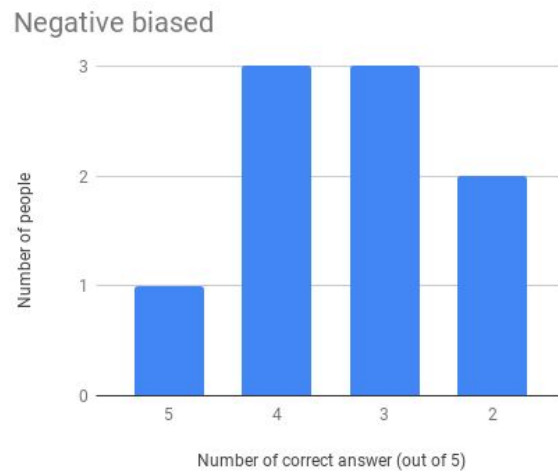
We observed that compared to the group of unbiased people, people shown positive images had better accuracy and were much more enthusiastic to continue doing the survey.

On the other hand, people who were shown a negative image, tend to dismiss the survey without completion of it or become unwilling to concentrate on the survey.

Following graphs show the trend of the number of people who gave how many correct answers to the intellectual questions asked to them.

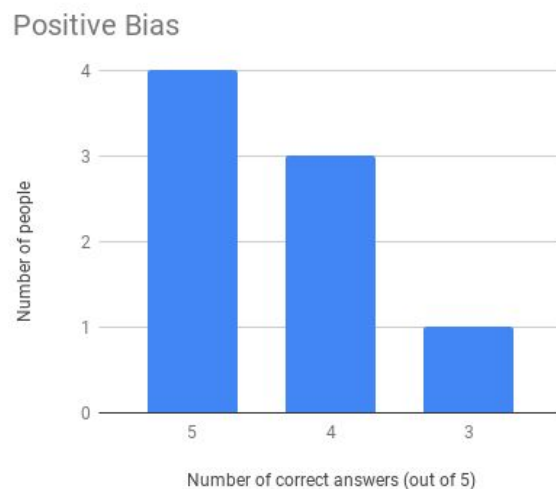


Avg marks = 3.82



Avg marks = 3.33

Comparing to the group of unbiased people, the group of negatively biased people has a significant decrease in average marks.



Avg marks = 4.375

From the data, we can see that there is a huge difference in the accuracy of people giving the test based on which category they belong to. Positive bias has the best numbers.

There were certain questions just to test the concentration of the respondent, their response time and correctness of their answer. Eg.

**Three chickens, two dogs, one cat and four cows have a total of how many legs?**

Enter number of legs

Compared to an unbiased group the positive biased group had better concentration and response time, whereas negative biased group was easily irritable by the question and their inability to do it in the allotted amount of time. Same group (negative bias), when shown positive image had better statistics.

## CONCLUSION

**The two surveys came to the conclusion that the impact that a negative bias has on people is much more compared to a positive bias. The emotions can be altered by external biases, here- happy and sad images.**

**We can make people have better efficiency by giving them positive bias. Showing positive and happy images tends to improve the efficiency and responsiveness of people.**

## REFERENCES

- <https://www.psychologistworld.com/emotion/psychology-of-happiness-positive-affect>
- <https://www.pathwaytohappiness.com/happiness/2007/09/27/mind-affects-happiness/>