Survey Methodology – Data Science Department

Team_6, Phase 3

Sampling And Pretest

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1. Introduction

In the third phase of this research study, it is crucial to define all the necessary components required for completing the sampling process. This phase involves a meticulous planning and implementation of the **sampling** procedure to ensure the accuracy and validity of the data collected. A well-executed sampling process is essential for obtaining reliable and meaningful results that can be generalized to the target population.

One of the primary objectives of the third phase is to validate the entire research process. This includes testing the research instruments, sampling procedures, data collection methods, and analytical techniques to ensure that they are appropriate and effective for the research question. The **pretest** phase is particularly important in this regard as it helps to identify any potential problems or weaknesses in the research design, enabling researchers to make necessary modifications before beginning the actual data collection.

Therefore, we have divided this into steps as follows:-

2 - Sampling

2.1 – Defining the target population

Our population is FCDS students in Egypt, Alexandria that have, these characteristics apply to them :

Age : Even though movies appeal to people of all ages, in this survey we are interested in people with age that lies between 18 to 24, which is basically the normal age of a college student .

Gender: Our survey aims to gather feedback from individuals of all gender identities. This inclusive approach enables us to analyze the preferences and opinions of both males and females, which could potentially provide valuable insights into the types of movies preferred by each gender.

2.2 – Choosing the sampling method

When selecting a sampling method, there are various options to consider. However, for our study, we have determined that random sampling is the most appropriate approach. This decision is because the distribution of first, second, third, and fourth-grade students at FCDS in Egypt, Alexandria is equal. Consequently, there should be no specific age group dominating the sample.

By utilizing random sampling, we can ensure the data collected is unbiased and minimize effort, as this method is relatively straightforward.

There is no need to employ other sampling methods, such as stratified sampling since the college consists of a homogeneous group of individuals who share equal importance.

2.3 – Determining the sample size

The sample size will comprise the students of FCDS who have registered for the survey. Considering this information, the sample size will be equal to the number of students in other groups, which amounts to **360 – 20 = 340** people.

Even though our sample mainly consists of all students that registered Survey, we will add to them some of the other students that didn't, there will be no bias in the data because they are a homogenous group of people .

So basically, it doesn't matter if we chose all students that registered Survey and added to them some of those who didn't, because they are all a homogeneous group of individuals that share the same **general** characteristics.
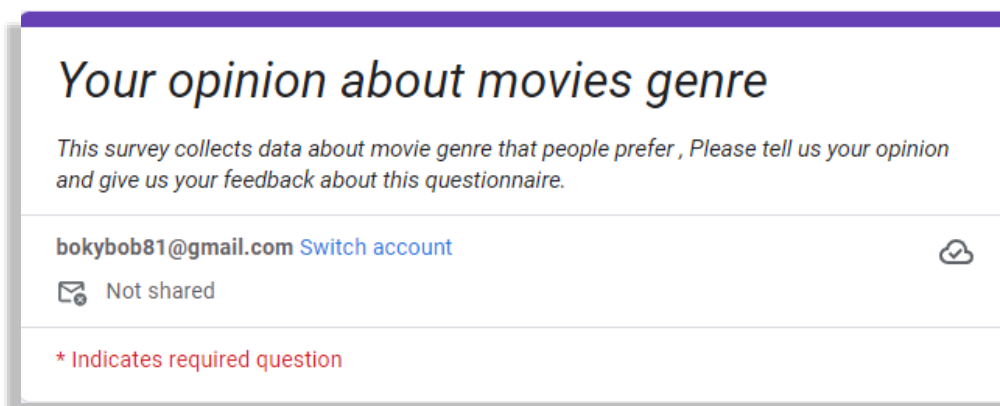
3 - Pretest

3.1 - Selecting the group of participants for the test

After researching, we have found that a sample size of 5% to 10% of the main group is ideal for testing a survey on a specific group. Our main group consists of 300 to 400 individuals, so we have chosen a sample size of 30 individuals to ensure that we have a representative sample. We selected this sample through random sampling, like our approach for selecting the main group. Obtaining feedback from this sample will enable us to gather insights and make informed decisions.

3.2 - Administering the test of the survey

We will use "Google Forms," a free online platform, to administer the questionnaire to our sample. This approach will enable us to collect responses efficiently and streamline the data collection process. To gather feedback from participants, we will include a question at the end of each section, such as asking if any concepts were unclear or if any questions could have been worded better, this question of course will be open ended to ensure we get an unbiased feedback form the participants , here is the header of the form :

3.3 - Analyzing the results and determining modifications

Now we will analyze the results obtained from the survey responses and determining any necessary modifications to the questionnaire or study design. This step is essential for ensuring the accuracy and reliability of the study's findings. After collecting the responses, the data will be analyzed to identify any necessary modifications to the questionnaire, these modifications will be made based on the feedback received.

The modifications may include changes to the wording or format of questions, the inclusion or exclusion of certain questions, or adjustments to the survey sample size or demographic makeup. This step is crucial in obtaining high-quality data and ensuring that the study is valid and reliable.

Based on the feedback received from our survey participants, we have detected some questions that need a little bet of adjustments .

Here they are with some images to make the modifications clear .

1- We detected a vague term that people didn't understand which is the word Matinee

Before

4 - When do you usually go to the movies? *

○ Weekday - Matinee

○ Weekday - Evening

○ Weekend - Matinee

○ Weekend - Evening

After

When going to the Cinema, you usually go.. *

◉ Weekday - Afternoon

○ Weekday - Evening

○ Weekend - Afternoon

○ Weekend - Evening

2 - We have changed the ranking questions style by decreasing the number of choices to 5 instead of 8 and we transformed the question to a matrix in google form , which makes it easier for the user to answer .

Before

1- Please rank the factors that you consider when deciding to see a movie. (1 = most important, 8 = least important)

Cast

	1	2	3	4	5	6	7	8	
Most Important	O	O	O	O	O	O	O	O	Least Important

After

Fourth: Please rank the factors that you consider when deciding to see a movie.

1 = Least Important *
5 = Most Important

	1	2	3	4	5
Cast	◉	O	O	O	O
Genre	◉	O	O	O	O
Director	◉	O	O	O	O
Studio	◉	O	O	O	O
Reviews	◉	O	O	O	O
Quality of Story	◉	O	O	O	O

3 - One of the most frequently mentioned issues in the feedback was the lack of an option for participants who do not go to the cinema. As a result, we added a new section specifically for those who prefer watching movies at home.

So here we determine whether the participant watches movies at home or at the cinema .

The best movies are those that you watch..

Where do you usually watch movies *

⦿ In the Cinema

◯ Home

The participant will go directly to this section if he watches movies at the cinema .

Fifth: In the Cinema

When do you usually decide which movie you are going to see? *

◯ Before going to the Cinema

⦿ In the Cinema

The participant will go directly to this section if he watches movies at the home .

Fifth: At Home

Why do you prefer watching movies at home instead of going to the cinema? *

Thanx for your patience! 😊