## SCS 3216 Research Methods

Tutorial 07 - 20000669

Utilize data sources of investigating the impact of online teaching during the pandemic period on the mental health of university students

In the way of investigating the impact of online teaching during the pandemic period on the mental health of university students, we have to collect data from various kinds of sources like surveys, interviews, and group discussions. So this report considers justifications for data sources based on validity, quality, credibility, security, privacy, data compatibility, and ethical considerations in the data collection process.

There are three ways to collect data.

## 1. Surveys:

We provide surveys for university students who experienced online teaching during the pandemic period. The survey will be created mainly focusing on collecting quantitative data with some qualitative data. Their GPA, no of hours with work, understanding level, and stress level are some of the quantitative data. Difficulties, challenges, and expressions are qualitative data that we can get from text-based questions. We will plan to share among university students all over the country with our friends' help. So we will able to collect a well-distributed data set.

For quantitative data, we provide selective options instead of text input for most of the cases. Then we can make sure input data are valid at some sort of level. We decide to create survey questions after conducting a few conversations with university students that experienced online learning and lectures. Then we can get some sort of understanding about the domain and it will help to make quality questions.

To ensure privacy we are collecting survey data anonymously. And we have to store those data safely and make access for authenticated ones to ensure the security of data. As earlier mentioned we will share surveys with students in all universities in Sri Lanka. That can be ensured to reduce potential biases.

For ethical considerations, we collect those data after informing them about this research and with their voluntary participation.

## 2. Interviews:

We will conduct interviews with some of the university students to observe their experiences and difficulties. From this approach qualitative will be collected. In this interview, we will be trying to observe the data in story based way. There will not be specific questions.

When we consider the quality of data, we cannot actually ensure it because it depends on the student. But we are sure, we can observe valuable data from the story. As the previous method after observing data from the interview, we have to store it safely. And we never store the student details. the interview will be only handled by authorized people. And students also should participate voluntarily in the interview. From that, we can ensure the privacy, security, and ethical considerations of this method.

## 3. Group discussions

The behavior of this method is similar to the previously mentioned method.

By considering the above justifications we can ensure the quality, validity, security, privacy, potential biases, and ethical considerations.