



RESEARCH METHODS

Practical 06

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Scenario 02

Research Question: What is the impact of the COVID-19 pandemic and the shift to online teaching on university students' mental health and academic engagement, and how can universities provide effective support to promote student well-being?

Sources:

1. Online Surveys: Develop an online survey targeting university students to assess their mental health status, academic engagement, and experiences with online learning during the pandemic. Include questions such as:
 - Do you feel that online learning has positively or negatively impacted your academic engagement and learning experience?
 - Have you sought any mental health support or counseling services during this period?
 - What specific challenges have you faced in adapting to online learning, and how have you coped with them?
2. Focus Groups: Organize virtual focus group discussions with university students to gain in-depth insights into their experiences, emotions, and concerns related to online learning and mental health. Prompt questions could include:
 - How has the pandemic affected your social interactions and feelings of connectedness with peers and instructors?
 - Have you experienced any changes in your motivation or academic performance during online learning?
 - What kind of support or resources would you find helpful in managing your mental health and academic well-being during these challenging times?
3. Academic Performance Data: Gather data on students' academic performance, including GPA, course completion rates, and grades, before and during the pandemic. Compare these records to identify any potential correlations between mental health challenges and academic outcomes during online learning.
4. University Counseling Centers: Collaborate with university counseling centers to obtain anonymized data on the number of students seeking mental health services and the common issues they report during the pandemic. This information can shed light on the types of mental health support needed most.
5. Social Media and Online Forums Analysis: Conduct sentiment analysis on social media posts and online forums to capture the emotional responses and experiences of students related to online learning and mental health. This can provide valuable real-time data on their well-being and challenges.

6. **Comparative Study:** Compare the experiences of students in universities that adopted different online learning models or provided varying levels of mental health support during the pandemic. This approach can help identify best practices and effective strategies for student support.

Scenario 03

Research Question: What is the impact of an exam-based education system on students' mental well-being, and how can a shift towards valuing practical skills, critical thinking, and creativity improve students' success beyond exam scores?

Sources:

1. **Student Surveys:** Conduct surveys among students in different educational levels (A/L, O/L, Scholarship Exam) to gather data on their experiences with exams, perceived stress levels, and feelings of pressure to perform. Include questions such as:
 - How do you feel about the current exam-based education system and its impact on your overall well-being?
 - Do you believe that exams accurately reflect your true abilities and potential?
 - Have you experienced any mental health challenges, such as anxiety or stress, due to exam pressure?
2. **Interviews with Educators and Administrators:** Conduct interviews with teachers, school administrators, and policymakers to understand their perspectives on the effectiveness of exam-based assessment and their views on the importance of practical skills and critical thinking in education.
3. **Comparative Study:** Compare the academic performance and post-education outcomes of students who have experienced an exam-based education system with those who have experienced alternative assessment methods. This could involve comparing students from different regions or countries with varying educational approaches.
4. **Case Studies:** Select specific schools or educational institutions that have adopted alternative approaches to assessment, emphasizing practical skills, critical thinking, and creativity. Conduct in-depth case studies to evaluate the impact on students' well-being and academic achievements.
5. **Focus Groups:** Organize focus group discussions with students, parents, and teachers to explore their attitudes towards the exam-based system and the potential benefits of a more holistic educational approach.
6. **Comparative Analysis of Education Systems:** Analyze education systems in different countries, especially those that have successfully implemented non-exam-oriented

approaches. This analysis can provide valuable insights into the effectiveness of alternative methods.

Scenario 04

Research Question: What are the specific lifestyle habits and socio-economic factors that contribute to the development of chronic diseases or non-communicable diseases (NCDs) among individuals in Sri Lanka?

Sources:

1. **Health Surveys:** Conduct comprehensive health surveys among individuals in Sri Lanka to gather data on their lifestyle habits, including diet, physical activity, tobacco use, alcohol consumption, and stress levels. This data will help identify specific lifestyle behaviors associated with chronic diseases or NCDs.
2. **Medical Records:** Access and analyze medical records of individuals diagnosed with various chronic diseases or NCDs to understand their health conditions and medical history, which can provide insights into potential risk factors.
3. **Comparative Studies:** Compare data from individuals with chronic diseases or NCDs to a control group without such conditions, enabling researchers to identify significant differences in lifestyle habits and socio-economic factors.
4. **Focus Groups:** Organize focus group discussions with individuals living with chronic diseases or NCDs to gain qualitative insights into their lifestyle choices, socio-economic challenges, and perceptions of disease risk factors.
5. **Community Studies:** Conduct studies within specific communities or regions to explore the prevalence of certain lifestyle habits and socio-economic factors and their association with chronic diseases or NCDs.