



**CSE 4451**

**Human Computer Interaction**

Section: **B**

Mid Assignment 1

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1. No. Answer

a) I would choose multiple methods to get a proper idea.

- i. Interview: I will conduct a full structured interviews to gather astronauts personal experience, challenges and ideologies regarding their life on lunar base.
- ii. Surveys: Distribute surveys to gather broader data on psychological and physical challenges from a larger group of astronauts to ~~quantify~~ quantify their experience.
- iii. Participant Observation: I will try to observe astronauts interactions in lunar based environment to understand their thinking better.
- iv. Contextual Inquiry: Interaction with astronauts while they perform task in their environment will allow me understand their behavior better.

b) Reasons I choose these methods are given below:

- i. Interview: These will help gathering essential insights from astronauts about their personal experience, challenges, and strategies in a new environment.
- ii. Surveys: This can provide quantitative data that identify patterns and common issues faced by astronauts.
- iii. Participant Observation: Allows for real-time observation of behavior without relying solely on self-reporting, giving insights into the physical and social environment.
- iv. Contextual Inquiry: Provide rich qualitative data on how they adapt to the challenges in their environment.

c)

- i. Interview: I will try to connect with an astronaut and I will try to reach to him ~~on~~ physically on a place or online through meet or zoom. I will ask open ended questions as much as possible, so that they can answer freely.
- ii. Surveys: I will design a google form with open ended questions to get ~~fixed~~ answers. But it will be short, so that they don't feel wasting their time.
- iii. Participant Observation: I will remotely observe their daily activity through camera or other sensors of the lunar base.
- iv. Contextual Inquiry: I will directly observe them and will ask questions in real time while they perform a task. This will give insights to the tasks.



## 2. No. Answer

### 1. Unstructured Interview:

Unstructure interviews are open-ended and allow the participant to lead the conversation. The researcher has little pre-determined structure, relying ~~based~~ on instead on discussion.

Exploring unknown challenges in astronauts adaption:

When researchers at an early stage and possess limited knowledge about astronauts psychological and social experiences, unstructured interviews allow astronauts to freely share stories and personal experience.

### 2. Semi-structured Interview:

Semi structured interviews are more flexible, with a mix of open ended and structured questions. The researchers have a set of key questions but change them based on the answers of the interviewee.

## Understanding Social Dynamics in Teamwork:

Semi structured interview could explore how astronauts cooperate and resolve conflicts during missions. The interviewer might ask about specific instances of teamwork or conflict resolution, but it will allow them to add details.

### 3. Structured Interview:

Structured interview follow a strict, pre-determined set of questions, allowing consistency.

#### Post Mission Debriefing:

After multiple missions have conducted, structured interview will help to get the specific topic interviewer wants to know.

When there is a chance that the interview can go out of hand, this is the best solution.