# How to Support International Students Who Just Arrived in London? – An Experimental Study

Individual Coursework
6CCS3HCI Human-Computer Interaction

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#### Introduction

This part will introduce the main problem statement and the user needs based on our group final decision.

"We discovered that international students commonly face challenges when dealing with the organisational and administrative aspects of moving to London. Factors like accommodation, finances, transportation and finding ways to meet people can be overwhelmingly stressful for the majority of students. We therefore aim to introduce a solution to streamline this process of gathering resources and centralising information in a comprehensive hub, which will provide students with the tools and resources for a smoother transition and a more positive start to their life in London."

### **Link to Group Prototype**

Here is our final group prototype:

https://www.figma.com/file/Yqw39K1NnPebK1WENffMD5/HCI?type=design&node-id=0-1&mode=design&t=XcIwVlc2dYarhJEB-0

## **Experimental Design**

- Hypothesis: International students who have just arrived in London that
  have an experience using our diverse information hub providing a world
  of resources including accommodation, joining university, language
  support, financial tips, mental health advice and jobs & opportunities to
  help thrive in this magnificent city London, will feel significantly lower
  levels of stress and better integrate with various aspects during their
  initial months living in this new city, compared to those who do not have
  the access to this app.
- Targeted Population: This study will primarily involve international students who have arrived in UK within the last three months and are currently enrolled at a university in London. This population will vary and include students from different countries, ranging from various parts of the world, including Asia, Europe, Africa, America, among others. The purpose of selecting such a diverse group is to ensure that this hub is effective for international students with a wide range of cultural and national backgrounds, rather than being tailored to students from specific country. The time constraint is to confirm that this hub is actively

supporting students who are new in London, and to lower the difficulty of measuring the effectiveness of this hub.

• **Independent Variables:** the use of this information hub, duration of stay in London (e.g. 1 months, 1-3months), level of English Proficiency (e.g. basic, fluent, proficient), previous international experience.

#### Dependent Variables:

- 1-3 variables could be accessed by a survey or questionnaire.
- 4-5 variables could be accessed by a survey or questionnaire/the usage data behind the information hub.

#### 1. Adaptation Level and Stress Level

This should include different aspects of adaption and stress level such as social adaptation/stress level, or their academic adaption/stress level. Measure of how well international students adjust to their new life in London to access students' feelings of comfort in the new environment. These would be direct indicators of how well student integrate with new environment.

#### 2. Social Integration

Measure of how many international friends they have made so far, the rate of the sense of belonging, the frequency of social interactions and the participation in social activities. Social integration is an important part of student experience which could have a big impact on newly arrived international students.

#### 3. Overall Satisfaction with the Relocation Experience

Rating overall happiness and satisfaction for students with their relocation process and experience. This would indicate how well students relocate to this new environment to start their new life.

#### 4. The Frequency of Using the Information Hub

Measure of how frequently students use this information hub (e.g. daily, weekly, monthly). This would be related to the effectiveness of the information hub as we could see whether there is a correlation between the frequency of use and how well students get used to London.

5. The Most Frequently Accessed Themes in the Information Hub Identify which sections or resources within the hub are accessed most frequently by the students. This could include areas like

accommodation assistance, social events, financial tips, and language support. This variable helps to understand the specific needs and the preference to the students, which could be influenced by their cultural background, prior experiences, and current challenges they face in London

#### • Experiment Design:

The experiment would mainly be divided into two groups and both further be divided into detailed subgroup based on the duration of stay in London, level of English Proficiency and the previous international experience. They would take the survey before starting to use the information hub, and then take the same survey after a specific period of time to see the difference to compared with each other. As this experiment involves human participate, briefly mention any ethical considerations or approvals might be needed.

- 1. Group 1(Users of the Information Hub): This group consists of international students who use the information hub. Within this group, the frequency of use this information hub and the most frequently accessed theme in the information hub will also be measured.
- 2. Group 2(Non-Users of the Information Hub): This group includes international students who do not use the information hub.

This experiment will employ a between-subjects design because this information hub is designed for students who is newly to London without extra experience. Due to this key factor and the time constraint, it would become less relevant if the within-subjects design is chosen.

# Threats to Validity

#### • Internal Validity:

- 1. Selection Bias: There is a risk that the students who choose to use the information hub might inherently differ from those who do not, potentially impacting the outcomes. This is addressed by dividing groups such as duration of stay and English proficiency, but there still remains the limitation of inherent self-selection into the user group that cannot be controlled for.
- 2. **Measurement Bias:** The survey involves a subjective nature in

measuring stress level, adaption level, and this could be bias as different people may have different cognition of measuring a level. This could be addressed by ensuing validated and standardized survey instruments but still cannot avoid the subjective interpretation of survey questions by participants.

#### External Validity:

1. Ecological Validity: Conducting the study in the real environment where students live and study would be good for results generalized to real-life setting, but the controlled experimental conditions might not perfectly reflect the everyday life usage of the hub.

#### Reliability:

1. Response Reliability: Users and non-users will take the same survey twice; therefore, it is important to ensure the response reliability from both users and non-users. This would aim to have participants complete the survey in similar conditions each time, considering factors such as location, time of day, the medium of the survey, and the timing of survey. However, achieving perfect consistency is still challenging in the real-world setting.