

Designing a Role-playing Interface System to Improve International Students' Well-being

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Introduction

International students are among the many groups of people who move away from their personal networks to a completely new environment for extended periods of time [1]. While studying overseas comes with benefits [2], there are challenges associated with moving away from a social environment that the individual finds comforting and is already familiar with [1].

Some international students may find it difficult to adjust to the new environment and as a result may face a lack of social interaction, especially with local residents. Feelings of loneliness and social isolation may subsequently arise, which could negatively impact both their physical and mental well-being.

Today, the use of technology has enabled many previously difficult problems to be solved or alleviated. Can technology, in particular interactive technology, also be used to help alleviate this problem? **This research investigates how interactive technology can be used to prevent feelings of loneliness and social isolation from arising among international students.**

Methods

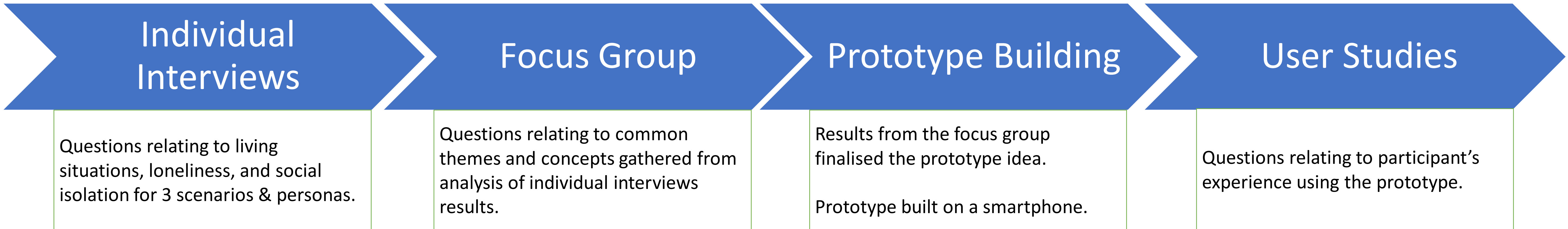
A Grounded Theory [3] approach was adopted to gather and analyse data. The data collection process involves theoretical sampling, and participants become intelligent contributors to the idea. Participants are chosen based on their age and citizenship status, and not based on whether they were lonely.

Because loneliness and social isolation can be a sensitive issue to talk about, a simulation/role-playing approach was adopted for all stages of data collection

- **Scenarios, personas, and role-playing** were used to protect participants from the potential risks associated with discussing sensitive issues
 - Scenarios: background settings for the personas
 - Personas: characters that participants were asked to role-play.

Participants were asked to speak in a hypothetical way, based on how they thought the personas would act and feel, and not to disclose sensitive personal experience or issues. This is in line with the requirements of the Human Research Ethics Committee.

Results from each data collection are qualitatively analysed using coding



Results - Common Themes

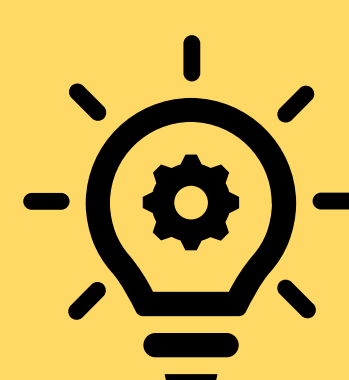
International students may experience increased difficulty coping with loneliness & social isolation	<ul style="list-style-type: none">• Lack of friends (especially when they first arrive)• Difficulty confiding in parents who are usually overseas• Other commitments (eg. work, chores, taking care of siblings)
International students want to mingle with locals, but may lack confidence	<ul style="list-style-type: none">• Embarrassed when speaking in an accent• Can't express their feelings well in a foreign language• Difficulty understanding local accent• Big cities can also feel overwhelming for students from rural communities
International students may face difficulty adapting to the local culture due to a lack of readily available & reliable information	<ul style="list-style-type: none">• Source of info: movies/TV shows, news articles, observation of other people, personal experience (including negative ones)• Negative personal experience discourages international students from interacting with local residents in fear of being judged or mistreated
Patience and acceptance are important for international students	<ul style="list-style-type: none">• Patience with international students' ability in English (for non-native speakers) and to teach them local etiquette• International students wish to be pardoned and explained what they did wrong so they can learn, to be comfortable in a new environment, not be fearful and not be afraid to ask questions
There are social events to encourage international students to interact with others, but they don't always work	<ul style="list-style-type: none">• Although such events are interesting to them, they might feel intimidated by the sheer amount of interaction expected during the event, and overwhelmed by the number of unfamiliar things around them• International students (who are not confident in their English abilities) may feel even more overwhelmed when they need to talk and read in English
International students' eating and exercising habits may be negatively affected without the presence of a social companion or with social anxiety	<ul style="list-style-type: none">• For some individuals, eating habits could change depending on social factors• Most people seemed more motivated to exercise when there is someone else to exercise with them

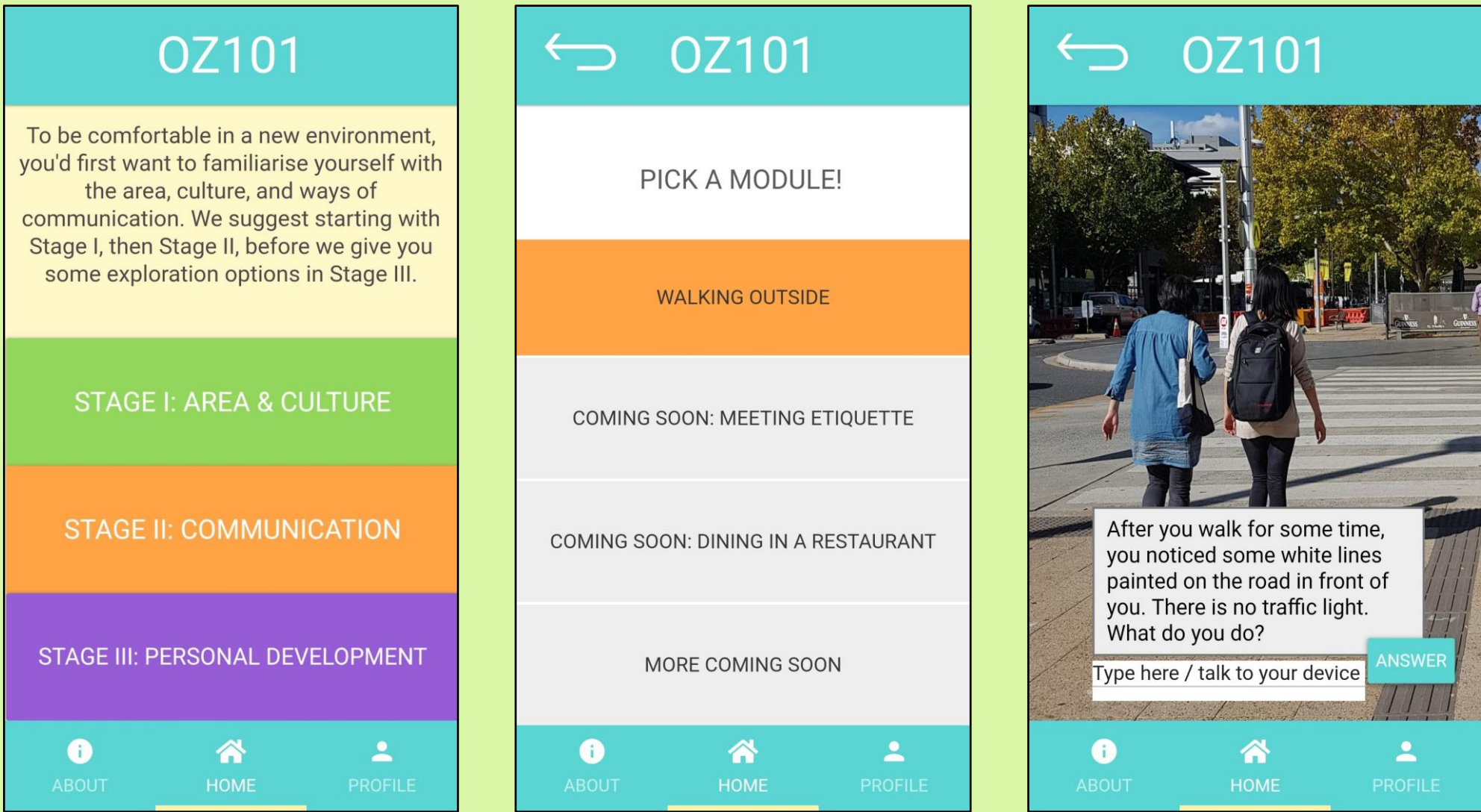
Underlying Theme

It is important for international students to be familiar with the new environment. In particular, it is important for international students to familiarise themselves with 3 components: area, local culture, and how most people socialise and interact with others in the local culture

To prevent loneliness/social isolation caused by a lack of social interaction, international students should develop cultural competence in the new environment, most importantly during their first few weeks upon arrival

- Prototype

 Of all the ideas that were thought of and discussed with participants, the idea to have an interactive guidebook seemed the most promising. With many participants commenting it should be interesting enough, **a role-playing interface system is proposed.**



Simulates common scenarios in Australia	Designed to build familiarity with area, local culture, and ways of interaction
Develop international students' familiarity with the new environment in stages	Slowly encourages international students to approach real people & events, applying what they learned in the prototype to build real life connections

- Feedback on the Prototype

- Approach of using stages is intuitive and enjoyable to participants
 - The success of the use of stages might imply that development of cultural competence is not something that can easily be achieved in one step, but instead something that can only be built in progression
- Use of simulation and hypothetical scenarios (to familiarise themselves to the new environment) is interesting and enjoyable to participants
 - Helped to introduce new keywords
 - Kept their attention throughout the learning process
 - But should not be overused. It's more suitable for more complex learning
- User input feature is liked by participants
 - Easily maintains their attention while doing the simulation
 - Participants wished their input are considered in the simulation progression
- Participants indicated that university should be involved

Conclusion

1. Lack of cultural competence was revealed to be an underlying issue behind international students' loneliness and social isolation, as it may restrict the quality and quantity of social interaction
2. Simulation and hypothetical scenarios involving cultural competence can be employed in interactive technology to help prevent loneliness and social isolation
3. Simulation and hypothetical scenarios appeared to have successfully handled the ethical barriers to investigating the themes associated with this issue

References

- [1] Matook, S., Cummings, J., & Bala, H. (2015). Are You Feeling Lonely? The Impact of Relationship Characteristics and Online Social Network Features on Loneliness, *Journal of Management Information Systems*, 31:4, 278-310, DOI: 10.1080/07421222.2014.1001282
- [2] Byram, M., & Feng, A. (2006). Living and Studying Abroad: Research and Practice, Languages for Intercultural Communication and Education: 12
- [3] Corbin, J., & Strauss, A. (2008). Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory.

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