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Conducting Empirical Research within Second Life

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Thanks to LoriVonne for the introduction.

Thanks to the conference committee for giving us the opportunity to share our research and thoughts with you.

Thanks for coming along to our presentation.

There are two parts of our presentation which are on two different projects in which we are conducting research on SL and within SL.

Our aim today is to share our experiences with you about how we prepare for and conduct empirical research within SL.

The first project in the e-learning domain is called DELVE – Design of learning spaces in 3D virtual environments.

In this project we are investigating the relationship between the design of learning spaces and the design of educational activities.

We are eliciting students', designers, and educators' perceptions of 3D learning spaces – particularly on the realism and non-realism aspects of the designs.

We will be presenting our research on the DELVE project in this conference on Sunday.

For the DELVE part of the talk, we will discuss on how we are employing SL as a platform for conducting research with students, educators and designers in focus groups and in one-to-one interviews.

The second project is in the e-business domain.

My colleague, Minh Twine (who is here) and I along with three other colleagues are investigating consumer behaviour in 3D virtual worlds.

Minh's research involves investigating consumer experiences in SL and the consequences of these experiences on the consumers' expectations and perceptions of traditional 2D e-commerce.

Minh is conducting one-to-one interviews with the shoppers in 3D virtual worlds.

In both the projects, SL is the subject of our research.

We are also conducting our empirical investigations within SL – that is, we meet with the participants in-world.

However, in DELVE (the first project), our recruitment of the participants is primarily in the real world while in Minh's project, the recruitment is within SL.

I will discuss the DELVE part of our research while Minh will discuss the e-business strand of our research.

*The first step is to create a researcher's virtual world identity.

Hine (2000) calls its self-presentation in virtual ethnography contexts.

Therefore, it is useful to complete the profile information of your own avatar.

That is, giving some information of your first life (affiliation with the university), details of your research, and also including web links to the project.

This gives the person who you are approaching an opportunity to find out more about you and the project.

Therefore, your profile or identity in SL does matter if you aiming to carry out research within SL.

*Next I will discuss recruitment

We have recruited participants through a survey (on Survey Monkey) when we explicitly asked the participants if they would like to participate in interviews.

The survey has also helped us to give the background of the participant which is useful before you conduct the interview.

The other major source of participants has been the tours of educational islands which are conducted every alternate Sunday by Esme Qunhua and Janita Collins.

The tours have helped me to network and connect with people and I have contacted them later on if they would be willing to participate in interviews.

The third way in which we have recruited participants to send a message on the various educational groups – a short message with mention of a prize draw of say, a headset for SL.

While interacting with prospective participants, it is important to mention that the Ethics Committee of the institution has approved the research.

This somewhat assures the prospective participants that it is a research project based in an institution which has been validated.

Whether you need to know both real and SL names depends on the research.

It also depends on the data protection guidelines that you have signed for.

For example, if I am conducting research with some of my university's students, it is important that I have real names and SL names of the students.

This is because of the data protection act in the UK, students can request for their data and at that time, if a search is performed over the university servers, it would be by the real name.

*Next I will talk about the actual logistics of the interview

As the preparation for the interviews and if the participants haven't participated in the survey, we request them to fill up a pre-interview questionnaire.

This questionnaire captures the background information about the person; how long they have been in SL; avatar name, and some specific questions related to our project.

We also ask the how they would like to be interviewed.

We give the option of phone too and out of 35 participants or so that we have interviewed over the last 5 months or so,

We have only had two requests for phone, the rest have all preferred SL.

In our pre-interview questionnaire, we also check whether the participant has preference for audio or text.

Along with this pre-interview Questionnaire, we send a project summary sheet and the consent form.

We have created materials for in-world participation too.

The project summary sheet gives the description of the project and data protection measures.

The RL contact details of at least two persons are given both in the consent form as well as in the project summary sheet.

This further enhances the confidence of the participant. Actually, through these assurances, we are building up a rapport with the participant.

I have noted that some participants may not really like you to be a friend/contact – particularly, if they are only interacting with you for this one interview session.

So don't offer them messages for friendship unless they themselves offer.

So if you are not a 'contact' or 'friend', then it would be useful to send a SLURL of the location where you are planning to meet.

However, it is good to check the preference of the participant, first, where they would like to be interviewed.

In my experiences, I have felt more comfortable if I invite the participant at an SL location which I am familiar with...

and where I know the audio works well and there is not much of lag.

Most avatars prefer to sit during the interview– so it is useful to check that the location has a good seating arrangement.

A café area works well which is semi-informal and friendly; but too informal setting or formal setting doesn't work very well.

It is all about creating the right atmosphere- some spaces have lot of background noise such as the water flowing; it is useful to avoid such places;

also choose locations that are not too busy so that you are not interrupted during the interview session.

In our empirical investigations on the learning spaces project, sometimes the participants take us to their learning spaces or islands

Through the preferences, I set up a SL folder where I store the chat / IM. I have the questions printed out (the semi-structured template).

Ahead of the interview, I also test that the folder is indeed recording the text.

*Coming to the questions

The questions themselves can either follow a free-flowing approach around a topic or as a defined list to be stepped through one at a time.

*Pilot run the questions with 2-3 participants

The questions need to be clear, unambiguous and trialled on a few test interviews.

Are they really getting at the core issues you are interested in? What's missing? What are they telling you that is not relevant?

*during the interview

If the participant has given the option of either audio or text, it is useful that you introduce yourself by voice and then move to the text for the interview.

The text will provide a ready transcript for analysis.

If you are recording audio, then it is useful to remind the participant at the start of the interview that you are recording the audio...

...even though you would have mentioned it in the project summary sheet or consent form.

I keep a text editor open – that way, as I am listening or reading the answers of the interviewee, I write any additional Qs in the text editor....

...I can copy and paste these Qs at the right time to ask the interviewee.

I also set up the preferences in a way that my hands don't move while I am typing – that way, ...

...even if I am typing a question, the participant doesn't know and is not interrupted which they would if they see me typing.

In a focus group, you might consider turn taking strategies

That is, you as an interviewer managing the interview by specifically addressing whom you wish to respond to and then asking in case anyone else has further comments

...just as you would do in real-life focus groups.

In the text file, I also pre-type some words, such as fantastic, thank you, that was interesting, great, and so on.

Then I can quickly copy and paste these words in between the conversation to encourage the participant –

...because the emotional cues are not yet there in SL.

*some tips now

You are really interviewing the person, but normally address them by their avatar name because within SL, their identity is via their avatar name.

Sticking to the time of the session that you had promised:

don't over run; in any case the interview shouldn't be more than an hour long – this is a RL guideline but also useful in SL.

If you would like to take snapshots, again ask the participant for their permission.

Preparation is very important – visiting the interview location beforehand, testing the audio, checking that the seating arrangement works.

Before exiting SL and at the end of the interview, copy and paste the transcript in a Word document.

So even if there has been some problem with the text file, you would still have the transcript.

Minh will now talk about his project on e-commerce.

Similar to the DELVE project in education, data collection is within SL.

Therefore, many of the issues involving interactions with participants, logistics, and ethics are the similar.

For this part of the talk, I'll focus on on-site recruitment and research ethics.

***On-site Recruitment**

I'll start by talking about recruitment. Our primary method of recruitment is site-based recruitment.

These guidelines were derived from real world studies, but adapted for SL. There are four steps to on-site recruitment.

***Defining the sample**

Defining your sample is just as important in SL research as in real world research.

We have a very broad category, which is 'consumers in SL'.

You can get more specific and perhaps narrow it down to 'female consumer in SL', or 'land buyers in SL'.

In any case, after the characteristics of the population have been defined, you want your sample to be representative of the population.

By that, we mean you are looking for a good mixture or balance of participants that cover the range of typical consumers without that population group.

***Plan site visits**

The second step is for site-based recruitment is planning which Sims you will visit in SL.

In real world studies, visiting shopping sites is considerably harder (travel, distances, managers or gatekeepers might restrict access to consumers) but in SL travelling to sites is fast and access is normally not restricted.

We normally use the 'showcase' feature in SL that includes a list of popular destination areas.

They also group sites into relevant categories, such as education and fashion so it is very convenient to use.

Internet blogs that cover SL are also a great way to find SL sites worth visiting.

In special cases, site access might be restricted; however, restricted access to a site usually has no effect on instant messaging.

So you can still talk to people without being on the same site.

In our case, since we are looking for consumers, the obvious choice is to visit shopping sites.

We try to visit many shops so that we are not always bothering the customers at the same store.

Although currently there is no policy against interviewing people inside stores, it is probably courteous to keep our presence as unobtrusive as possible.

Overall, planning site visits is not a very difficult step for on-site SL recruitment because of how easy it is to travel in-world.

[Picking avatars]

Assuming now that you are on a site, the third step is deciding whom to approach for an interview.

Again, the goal is to get a representative sample.

The challenge of doing this in SL is that personal characteristics are normally hidden.

There are no visible cues of a person's real life age, gender or socio-economic status. You cannot always assume that a male avatar is a male person.

Furthermore, age is very difficult to guess in SL for obvious reasons.

One thing that does help is to look at the profile before initiating contact. Sometimes, they may share information about their personal character. This will help you decide if they meet the criteria for interview.

Another cue from profiles is how detailed they are filled in.

Experienced SL users will tend to belong to many groups, and they often put more text in their description.

Also, experienced SL users generally have more to say, which makes them even better for qualitative research.

Generally, an avatars profile will give more useful information and cues as to whether they are good candidate, compared to their appearance.

So an avatar profile is a luxury we have in SL that does not exist in RL.

*How do you initiate contact?

The fourth and last step is to initiate contact.

Once you have decided that an avatar has good potential to be a participant, you can simply send them an instant message.

We would recommend starting with brief 'hello'. This is a friendly way to start a conversation that is non-committal.

Starting with a request or long introduction is probably is a bad idea as they may just dismiss it as spam.

However, if you try to initiate a conversation first, then you have that small bit of rapport that you can now build on.

For us, after the initial hello and reply, a single line describing who you are and what you want from the participant seems to work.

We get a high response rate with this, currently over 80%. And of course, always be polite and respectful, even when they reject your request.

A helpful thing to do early in this case is to make notes about the person's profile, where you talked to them, the time and date, etc.

Keeping a list of personal characteristics is especially important because it allows to you determine which kind of people are missing from your sample so you can balance it out.

SL has a feature where you can make notes about people on their profile tab.

Using this feature to 'tag' avatars is a good way to ensure you don't approach the same person twice.

At this step, you should also give the potential participant a chance to do the interview immediately or at another time.

Mention how long the interview will take.

Building a rapport is equally important in SL and RL.

Fortunately, in SL people are generally trusting and seem to want to help more often than not.

These four steps will help researcher focus their efforts when entering the field for onsite recruitment.

*Ethical considerations

I will briefly discuss three concerns of the Ethics Committee.

*First is the consent form

The project should have a standard process that allows a person to consent to the study and also clarifying a way for a person to withdraw from a study.

Just as we discussed earlier, a project summary sheet should make the participant aware of the purpose of the study and their rights as participants.

*Second concern is related to emotions

The ethics committee is concerned about eliciting emotions or altering the moods of participants.

Ideally, a study should not make the participant feel any discomfort or anger that is more than what happens from their everyday interactions.

In any case, it may be prudent to also include procedures to neutralize emotions or to make sure that the participant is going away from your study without lingering thoughts that may be uncomfortable.

Being completely honest about the study and giving an outline of how the interview will be carried out can avoid this.

This will eliminate any surprises or misunderstandings right away.

In SL, it is difficult to judge emotions, but in the context of online interviews, then the best practice would be to use polite gestures and avoid using words that may be interpreted wrongly.

For example, humour should be used with caution.

*The third ethical concern relates to data protection

This brings us to the fourth concern, which is data protection.

Ethics committee need detailed accounts of data protection procedures.

We achieve this by using encrypted USB drives (Iron Key).

We also store our data on the university servers.

We also create encrypted folders on the hard disk using the software truecrypt.org

That is where we come to the end of our presentation.

Resources

If you would like access to our research materials (eg pre-interview Questionnaire, interview templates, consent forms, project summary sheet) for either of the two projects, please feel free to contact us.

Our emails addresses and SL names are on the first page of this transcript.

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