Transcript of Honours Thesis Defence

Changhao Li

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1   Introduction

Information:
  Examiners: Prof Jinman Kim [1] and Dr Josiah Poon [2].
  Moderator: Dr Sue Inn Chng [3].

2   Overview

A quick look into questions and answers:

  Q1: Did you ask questions on elder's general IT skills in surveys?
  Q2: Do you know the area of health literacy?
  Q3: Did you conduct this survey outside Guangzhou in rural areas?
  Q4: Did you ask participants socio-economics questions?
  Q5: Did you get formal ethics approval?
  Q6: Did you consent elders who appeared in the photos?

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[1] Prof Jinman Kim is the lead of Sydney's Biomedical Data Analysis and Visualisation (BDAV). He is also the director of Master of Digital Health and Data Science.

[2] Dr Josiah Poon earned his BSc(Hons) in Manchester, MSc in Deakin, and PhD in Sydney. He has wide research interests, including Multimodal NLP, Information Extraction and applying data mining and other IT techniques to Traditional Chinese Medicine (TCM).

[3] Dr Sue Chng is an Associate Lecturer at the University of Sydney.

3 Q&A Defense

The full transcript of Changhao Li's thesis defense is shown below.

Josiah: So we just start.

Changhao: Yeah.

Josiah: Alright. So, thank you for the project, it's interesting and I have a few questions that I would like to jump into. Um, first of all, you have done a lot of user studies and you also sent out some survey questions. One thing I'm not sure about, because you... I know that this is for the elderly, and you asked about some other demographic details. One thing I couldn't say is that you asked them about their knowledge of using WeChat, but how? Why? Are there any of, like, questions related to their IT skills because that may also influence how they use, or whether they could pick up things: even if they are not familiar with certain functions, they can transfer knowledge. But why such questions are not there?

Changhao: You mean the user studies, right?

Josiah: I mean, in some of your survey forms, like you asked the [inaudible] status, education background, pensions, living together or living in the city or rural area... But there are no questions about IT skills. So why do you think it's not important to be included?

Changhao: Well, for the user study, especially think-aloud and cognitive walk-through, it's critically important and we asked participants orally about their proficiency of WeChat, of the product, before these human evaluation methods like think-aloud and cognitive walk-throughs. We do ask those questions but they are... I think it's very important in the questionnaire as well. There are some questions reflecting the frequency of using WeChat: so, whether use once per week, two, three times per week...

Josiah: I didn't say that... I just wanna say that it's very focused on WeChat. My question is, why the elder's IT knowledge is not considered, because somebody could be using WeChat a lot but there's no other things that person can use, right? But if someone's, like, if I bring my colleague in UK, never heard of WeChat until several years ago, he might easily learn it because he is more of an IT person. So why is that not included in your survey form to ask that probable question?

Changhao: Ah... I understand that you mean I should not only ask specifically about WeChat. I should ask overall on IT skills.

Josiah: Yeah yeah... Yes. Because, like, you ask them about the income.

I would say that the income would have in fact influence or relation to the usage of WeChat, right? You ask the income and so on, so you know that there's some kind of relations between all these different factors, but IT skills should be one of the things to be included, but I couldn't see a question here.

Changhao: I see. For the questionnaire... Yes, for the questionnaire design... Yeah, thank you. Yeah Josiah, yeah, thank you, that's a good point. And for the questionnaire design, I think I was very concentrated on the demographic backgrounds and also only focused on WeChat cuz I only want to know specifically about this product's proficiency instead of other products. Judy told me that you should only focus on WeChat, not other apps, because that's not relevant in this project, because I want to evaluate specifically, yeah, APP. But yeah that's a good point. I I think that serves as a confounding variable on the overall IT skills. Say if someone have no WeChat proficiency at all but have used ITs like um smartphones quite a lot, that might also change the... Maybe that person might learn we chat at a faster pace. So that's a very good point. Yeah, I I would certainly, um, be more careful on the questionnaire design in the future if... Yeah, it's very important.

Jinman: Just following up on the question, you know, there's a whole field called health literacy and they are also heavily targeted for elderly as well. And I think that's what central science was relating to. Have you actually asked life in each of your users, health literacy or in terms of how much of technology, [inaudible].

Changhao: I beg your pardon? Like, the proficiency of...?

Jinman: Is the Internet okay? Okay, yeah. So the bigger topic that when I went through your is the whole area called health literacy and that's about a person's ability to understand how literature as well as the use of health knowledge in technology. Have you considered that area?

Changhao: Em... Yeah, I haven't looked into that area during the literature review. I majorly focused on gerontechnology, I mean, gerontology and HCI and not that...

Jinman: Yeah yeah I get that. It's just that when you are targeting people with loneliness and isolation, it's a big health issue: mental health as well as well-being. Therefore there is massive work in that space, it has massive papers because it's so important and so topical. Yeah, so when I started with your abstract, you do target a very emerging and important area of isolation due to Covid, but then you don't really link that to any well-being or health issue, which I thought was a missed opportunity.

Changhao: Yeah, I mean that's really a pity because I wanted to add elements of loneliness, because I have read some books in positive psychology and I know UCLA loneliness scale is a perfect tool for us to evaluate loneliness, like, I used a four-question shortened scale of UCLA loneliness scale in the preliminary study, cuz I wanted to have... In april, in the early stage of this study, I wanted to evaluate, say, I distributed some preliminary questionnaires so that the participants might fill up, and if they are willing to participate in our future studies they might put their name phone and their places, living places. But ultimately, they were zero, literally zero people signed up to our future study. So it was quite frustrating, but because of the pandemic and the travel restrictions here where I am, so it's quite difficult to do things. But I mean if there's a longer study period, I would like to see how time changes if someone haven't used WeChat to keep in touch before and scale their loneliness level and then after, say, I have conducted volunteer sessions in teaching them how to use WeChat. After that period we might recruit someone, ah, the same people and then we scale their loneliness level again, and then to see the changes. Of course there might be lots of confounding variables, say, yeah, that's very difficult part too, like say, that day when we are measuring their loneliness level, they might be particularly happy about something or say their family just contact them again. So it's really difficult to measure loneliness. There are so many variables affecting the results so that's why we didn't go deep into it. I just mentioned it in the literature, saying that is a very important issue of measuring loneliness and, this makes sure looking to it, but we have to use more scientific and accurate way, and longer study period, and we might have more opportunities if there's a prolonged study. But within one year its quite tough to also include that.

Jinman: Your entire motivation is driven by that. Your methodology and your result is actually just on our elderly use of WeChat, which I thought there's a big issue. But I understand, it's a big study that, wow, you know, reading through your aim, it's fantastic. It's a big, big area. I get that.

Changhao: Yeah, there are a lot of questions.

Jinman: I also have a question. In your questionnaire, you asked people like whether they lived in city or rural area. And I see in your report, you said that their loneliness scale scores just 1.8805 so they are not particular lonely. But your initial chapters said that actually you tried to do that in a supermarket around (your home) to do the survey, and Guangzhou is a very populated city, right? So people there of course is (city-based), right? And

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compared if you're not living a rural area, I mean, we know that a lot of like, even not because of pandemic, a lot of these younger people left their hometown to the main cities around the world and leaving only the older people get only lonely, not to mention about the pandemic. But then your study didn't... I mean I think your survey didn't have had a chance to go to the rural area and ask those people to ask their loneliness. So your score here, or your survey, wouldn't be like biased just towards the city area since Guangzhou is a, like, cosmopolitan city?

Changhao: Yeah, thank you. I mentioned that in my limitations. It's really a very sad thing that I did not travel to other cities. I wanted to, I travel to, say, other cities during this year but only to Shanghai. It's also metropolitan and it was a quite short period of time and I did not conduct this study. So all studies were based in my hometown, Guangzhou and she is also metropolitan. Of course, the elderly people are staying there during their life, So their behavior might be quite different from those people living in, say, other rural areas in Guangdong province or even other provinces. So, yeah, if there's a chance, I would, you know, certainly expand the research targets and to see how those differences might happen and how they might, you know, behave differently when they're using WeChat or different functions that they're using. And yeah, that's really a pity and of course it's a selection bias. It is indeed.

Jinman: Did you capture the socioeconomic status among your survey participants?

Changhao: Ah, pardon?

Jinman: Socioeconomic status. So they, well, I mean, how wealthy they are or how well their life [inaudible].

Changhao: Oh, yes I did. I did include income question in the demographic questions, yes.

Jinman: And survey, so... You got ethics for that? I mean, I know you went to your friend's university ethics kinda form, but did you get approval for that?

Changhao: Em that's... Yes, that's a model. So thank you. Yes, Judy actually told me to obey my current, the Guangzhou's, say, ethics. She asked me whether China is doing. Is China doing well in ethics approval ratings recently? Are they like very informal or they are very rigorous. So, so she said I should include, you know, model ethics approval in my appendix from universities here in Guangzhou. And actually I have a friend in studying in the Guangzhou's South China Normal University, and, um, she studies

psychology there. So she has to study lots of, you know, doing lots of experiments with the users. So she happened to have this ethical form. And I took back, I asked Judy, what should I do with this? And Judy said you should field it out and put it in the appendix.

Jinman: That's great, but it means you never got approval for your research. Nobody actually approved the research.

Changhao: Emmm, haha, yeah, that's... Judy actually approved it, but that's no written.

Jinman: I think there two sets of ethics. Of course your supervisor can advise you, but that's not approval. Do not take into consideration of all the different things. I think as a thesis, it is okay, I think. But normally anything like you have a patient or you have a user, you ask them to do a survey or public opinion, you need a written consent. A written consent need to be validated by an ethics commitee. Do you have more experience on this?

Changhao: Yes, I actually asked my peers at our research group, say, I have a peer called Matthew, he also did lots of user studies in his thesis last semester. He graduated last semester and he was actually my tutor in Judy lecture, at tutorial. But he did not have an ethical approval in his thesis as well and I asked him about that. He said "I did not do that". I thought an undergraduate thesis... he thought like it was necessary for, I don't know, PHD? I don't know.

Jinman: No, it's not irrelevant.

Changhao: I mean, yes it's very important, I should do that. And ah, I asked Judy and she said I should only include the forms of the South China Normal University one, and then put in the appendix. And yeah, of course, I should apply for ethics approval for more formal (ones)...

Jinman: So, Changhao, so Judy is aware that your South China one is never been approved and you are just using the templates?

Changhao: Yes, because I cannot submit the forms to the South China committee of ethics. That's... They only approve...

Jinman: Yeah I understand that. I think it's okay as an honours project, because you don't publish it [inaudible], but I am not sure, I might need advice for this. Yeah, I mean, the thesis is in an open domain and anybody can access this if they request it.

Sue: Changhao, did you tell the people they are taking photos that you'll be using their photos in your thesis?

Changhao: Um, sorry, there is no photo actually. Those personas...

Jinman: No, I mean the workshops [inaudible]...

Changhao: Yes. For the questionnaire, I have consent questions, saying whether they agree to, um, using their data, acquiring their data and um, they're aware that the they are protected from the local laws and there's actually a consent question on that. That's by default. And the photos, as for the... that's the persona photo.

Jinman: No, no, no, no, I mean you have volunteered at the elderly smartphone classrooms, you did the volunteering, right?

Changhao: Oh! That one, [alarm on] sorry, so sorry. As for that volunteering, I did not have written consent. I just said oh is everyone happy to upload those? Maybe I'm doing this irregular, not formally, and not very...

Jinman: I mean, yeah, there are a lot of booze around it and you put other people's photo and [inaudible], it's fine. Yeah, putting thesis that's in the public domain, then it is not fine.

Changhao: I mean maybe, if I need to publish it, I might hidden... hide those photos if it's... yeah. But I mean, I put it because I thought readers might know how the environment are set, how I really did these volunteering sessions and how?

Jinman: Yeah that's very nice, but you have to tell people that you are using them.

Changhao: Yes, that's a very good point. Thank you.

Josiah: If they have a website and they publish some photos that, and use that photo, that's fine (and you can use it), because its a public domain, alright? So you can use them rather that you're using your own photo. So do you think that this center has some of the pictures of the activities at the center? Then you can, if you want to use a photo and maybe this is another way you can get around it.

Changhao: Oh, I see, right. Thank you.

Jinman: Yeah because it's in the public domain (already). We are just trying to protect you.

Changhao: Haha, thank you very much.

Josiah: It's a tricky issue [inaudible].

Changhao: Yeah.

Josiah: It's an ethical issue.

Changhao: Yeah, it's very important.

Josiah: I think the thesis might have a chance to (be published)... If it's the very internal report, no one will see it except your supervisor and marker of this. I think this is okay, but if the thesis is put say on a server then people can download and read and then it become tricky with the way that now...

It's really not official and proved by any ethics committee. That's the tricky part.

Changhao: I see. Right. Yep, I will do something if it's published...

Jinman: Changhao, this isn't really something that we can address so, you know, just have a chat or email to Judy to see what her experience is. She [inaudible] had a lot of this. I think maybe as a student project maybe it should be okay but I don't know the latest rules around [inaudible] regarding the thesis. I think she should know.

Changhao: Yeah, I will, thank you.

Sue: So Josiah, do you have any last questions for Changhao about his thesis?

Josiah: Emmm no, I think we went pretty much overtime... I think I have some other questions, but yeah...

Jinman: I just have one more question, [inaudible]. In your main results and to me the main, if you look at smartphone usage, you said from the 33 none of them use it. I'm assuming those 9 people are using phone calls?

Changhao: No, actually, some of them doesn't have smart phone at all. Yes.

Jinman: [Inaudible], how many people have phone?

Changhao: I mean, zero.

Jinman: So when you said 9 people, it means those people have no phone?

Changhao: Yes, when I asked them whether they use (smartphone), they said, oh, I don't have smartphone at all, we use landline or something at home. So yeah, there are still many people that are not having smart phones among those 33 participants. So yeah, no phone at all.

Jinman: When you say that 91.7% uses WeChat and then 66.7% just use phone calls, what's the overlap between them?

Changhao: Pardon?

Jinman: Overlap means how many of the 91%...

Changhao: Oh, it's a multiple choice question. So there might be some people who are also using WeChat that are using phone calls as well. So I can't look at the specific data right now, but amount maybe... four to five, like that level.

Jinman: Yeah, it's a pity you use multiple choice because I, you know, I'm pretty sure that [inaudible] all of them use phone calls, yeah.

Changhao: Well, some of them, I think...

Jinman: If they have smartphones, they must use phone calls.

Changhao: But I mean... Here, usually phone call is only for the people who are not familiar with, say, the delivery man. If they deliver some fast food to our home, they might use the phone call, but sometime... I think mostly, when we contact the people close to us in our family, we prefer WeChat. Lots of people in this survey prefer WeChat as their primary choice to contact specifically with family members, because if they have to dial the family members number, they have to enter eleven digits. So maybe they are not familiar using contact because there's a long contact and they have to find their family member among the list. So by using WeChat you can set their family members at the top, and then just click it, and then have it in a phone call is very convenient.

Jinman: Em, I think it's yes or no [inaudible], I mean at least from my experience of working with, technically to see Chinese patients or users, they prefer phone than any chatting software, and because it's more simple, I mean there isn't lots of "talk and hold", or you text. But then I mean, I don't know your demographics, maybe they will prefer WeChat.

Josiah: That's not the questions, because you said this is what the Chinese community [inaudible] so WeChat maybe [inaudible], so WeChat is... And I just want to say what was different that we perceive like between this Western and Chinese community because of the cultures of the practice in a community. So they might affect how they perceive sort of like communication tools so I understand, like, I mean like Jinman's question that in general people speak of [inaudible] because generally people pick up the phone and call, but maybe in China, it is a very different thing.

Changhao: Yeah,I think there's one more reason about that, because using phone call is not free and there's tolls. But using WeChat is totally free if you have WiFi. So yeah, that's the way to save money.

Josiah: Yeah, yeah.

Jinman: That makes sense.

Changhao: Yeah.

Sue: Okay, so we will stop here for today.

Josiah: Yeah.

Jinman: Alright.

Changhao: Thank you very much, I really appreciate it.